

SCREENING SITE INSPECTION REPORT
FOR
CITY DUMP
MORRISON, ILLINOIS
U.S. EPA ID: ILD980606727
SS ID: NONE
TDD: F05-8709-119
PAN: FIL0610SB

EPA Region 5 Records Ctr.



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APRIL 20, 1990



ecology and environment, inc.

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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the City Dump site under contract number 68-01-7347.

The site was initially brought to U.S. EPA's attention by General Electric Company through a Notification of Hazardous Waste Site form submitted in accordance with section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The 103(c) form, submitted in 1981, indicated that solvents may have been dumped on the ground at the site. The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Gregory W. Dunn of the Illinois Environmental Protection Agency (IEPA). The PA is dated July 6, 1987.

FIT prepared an SSI work plan for the City Dump site under technical directive document (TDD) F05-8709-119, issued on September 14, 1987. The SSI work plan was approved by U.S. EPA on February 24, 1989. The SSI of the City Dump site was conducted on March 14 and 15, 1989, under amended TDD F05-8709-119, issued on February 24, 1989.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of six soil samples, two monitoring well samples, and three residential well samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.

The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from SSI work plan preparation, the site representative interview, and federal, state, and local file information reviewed by FIT.

2.2 SITE DESCRIPTION

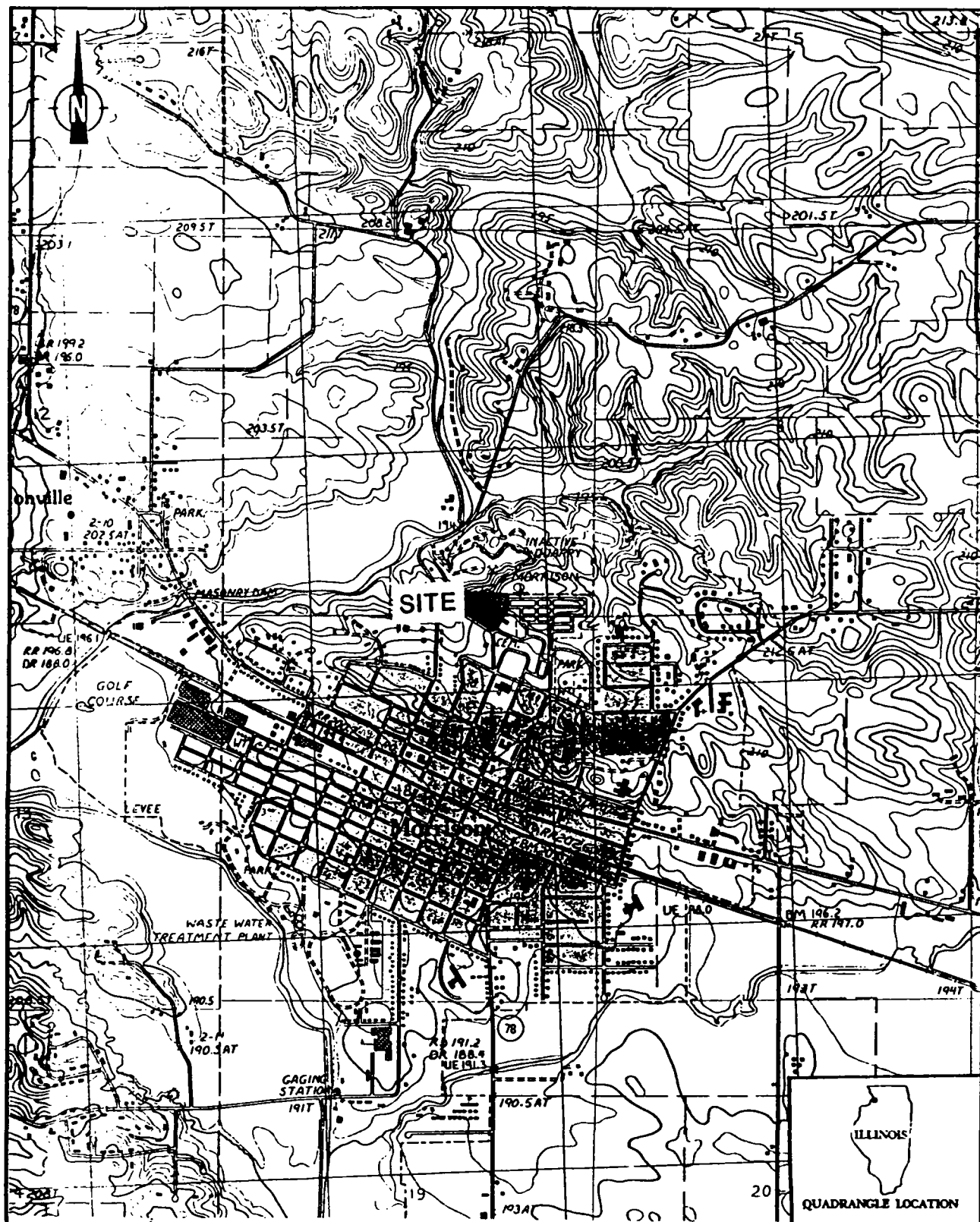
The City Dump site is approximately 3 acres in size, in Whiteside County (NW1/4NE1/4 sec. 18, SW1/4SE1/4 sec. 7, T.21N., R.5E.), on Genessee Avenue, at the north edge of Morrison, Illinois (see Figure 2-1 for site location). The surrounding area is residential and rural. A 4-mile radius map of the City Dump site is provided in Appendix A.

The City Dump site is currently a baseball field known as Presto Park. An abandoned quarry and a cemetery are located adjacent to the site.

2.3 SITE HISTORY

The site property is currently owned by the City of Morrison, which has owned the land for at least 40 years. The years in which dumping occurred on-site are unknown, but city officials believe that the dumping occurred prior to 1950. City officials also believe that the baseball field has been located on-site since the late 1950s (Tapson 1989). General Electric Company (GE) has indicated that on-site disposal may have occurred from 1949 to 1959 (U.S. EPA 1981).

The site was allegedly used as a landfill for disposal of household waste and possibly industrial waste (John Mathes and Associates, Inc.



SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, Morrison, IL Quadrangle, 7.5 Minute Series, 1985.



FIGURE 2-1 SITE LOCATION

[JM&A] 1987). A Notification of Hazardous Waste Site form 103(c) filed by GE in 1981 indicated solvents may have been dumped out of barrels onto the ground on-site (U.S. EPA 1981). City officials believe the site was originally intended to be part of the nearby cemetery but was unusable; thus, fill material was accepted to transform the site into usable property (Tapson 1989). It is not known whether the landfill or dump area was ever covered or capped.

In 1986, as a result of routine testing by IEPA under the Ground-water Protection Act, trichloroethene (TCE) contamination was discovered in several municipal wells (Well #1 435 µg/L TCE; Well #3 11 µg/L TCE). As a result, use of these two wells to provide drinking water was discontinued by the city of Morrison (Tapson 1989).

In 1987, a remedial investigation of the Morrison area was conducted by JM&A for IEPA (Tapson 1989). The purpose of this investigation was to determine the nature and extent of TCE contamination, as well as to identify potential sources of TCE. As a part of this investigation, a soil gas survey of the Morrison area was conducted from May 5 to 8, 1987. Two soil gas samples were collected at the City Dump site; however, these samples showed no signs of contamination. In addition, three monitoring wells were installed in the area of the site as a part of this remedial investigation (JM&A 1987).

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the City Dump site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan, with the exception that three fewer residential well samples were collected due to an unavailability of private residential wells in the area of the site. The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the City Dump site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Karen Spangler, FIT team leader, conducted an interview with the following Morrison city officials: Sam Tapson, City Administrator; and George Piersol, Mayor. The interview was conducted on March 13, 1989, at 2:45 p.m. at Morrison City Hall. Ted Nehrkorn of FIT was also in attendance. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

On March 14, 1989, FIT conducted a reconnaissance inspection of the City Dump site in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection was begun at 9:10 a.m. The reconnaissance inspection included a walk-through of the site to determine appropriate health and safety requirements for

on-site activities and to make observations to aid in characterizing the site. FIT also selected exact sampling locations during the reconnaissance inspection. FIT was not accompanied by site representatives during the inspection.

Reconnaissance Inspection Observations. The City Dump site is currently known as Presto Park. The site is a baseball field located on the northern side of the city of Morrison. The surrounding area is primarily residential and rural.

Although the site is surrounded by a fence, there is a break in each of the four sides of the ballpark fencing (see Figure 3-1 for site features). Bleachers are located at the southern end of the baseball diamond. Two dugouts are also located at the southeastern and southwestern edges of the baseball field.

The site is bordered to the southwest by Genessee Avenue. Open grassy fields containing scattered trees are located across Genessee Avenue from the site and adjacent to the site on the west.

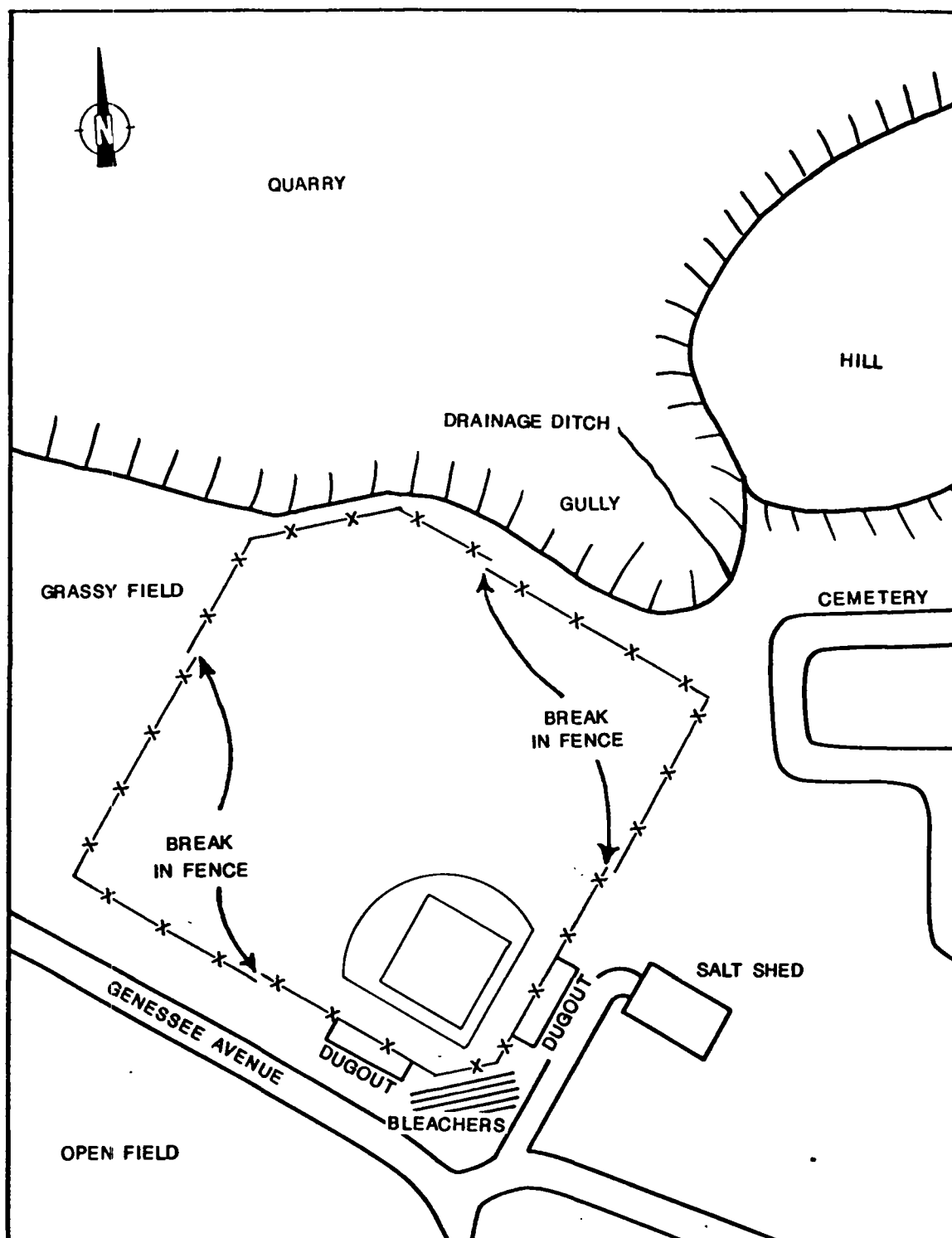
An abandoned quarry lies directly to the north of the site. Approximately 15 feet of level terrain lies between the edge of the ballpark fence and the edge of the quarried area. Near the northeastern corner of the site, a low-lying drainage ditch/gully was observed leading into the quarry area. Refuse, such as tires and appliances, was observed on the northern slope of the quarry area.

The site is bordered to the northeast and east by a cemetery. Two city-owned buildings are also in this area. A salt shed is located adjacent to the site to the east, and a city garage is located approximately 500 feet east of the salt shed. Photographs of the City Dump site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine levels of U.S. EPA Target Compound List (TCL) compounds and U.S. EPA Target Analyte List (TAL) analytes present at the site. The TCL and TAL, with corresponding quantitation/detection limits, are provided in Appendix D.

On March 14, 1989, FIT collected two monitoring well samples from the area of the site. On March 15, 1989, FIT collected five soil



SOURCE: Ecology and Environment, Inc. 1990.

SCALE
0 100 200 300 400 500 FEET

FIGURE 3-1 SITE FEATURES

samples, one potential background soil sample, and three residential well samples from the site and the surrounding area. The site representatives did not accept offered portions of the FIT-collected samples.

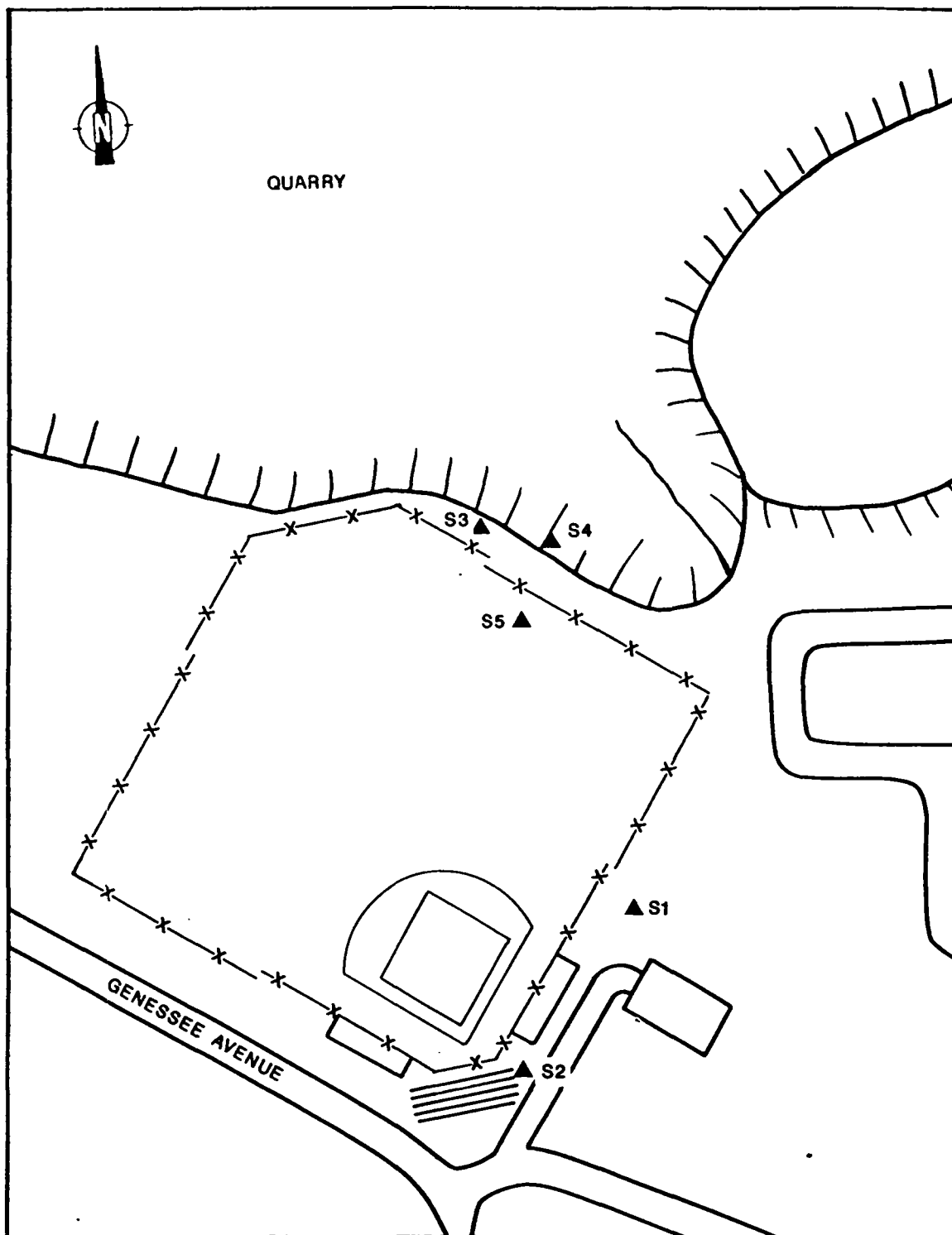
Soil Sampling Procedures. Five soil samples (S1 through S5) were collected on-site to determine waste characteristics at the site. Soil samples S1 through S5 were collected in low lying areas where runoff from the site could collect. Soil sample S1 was collected from the slope on the eastern side of the ballpark, at a depth of approximately 4 feet (see Figure 3-2 for on-site soil sampling locations). Soil sample S2 was collected from the southeastern corner of the ballpark at a depth of approximately 3 feet. Soil sample S3 was collected from the perimeter of the ballpark, approximately 10 feet north of the fence near center field, at a depth of approximately 4.5 feet. Soil sample S4 was collected from a sinkhole located on the northern side of the site, at a depth of approximately 4 feet. Surface soil sample S5 was collected from a hole located in the outfield of the ballpark.

A potential background soil sample (S6) was collected to determine the representative chemical content of the soil in the area surrounding the site. Surface soil sample S6 was collected from a wooded area approximately 75 feet south of Genessee Avenue and the site (see Figure 3-3 for off-site soil sampling location). The location was selected because the ground surface appeared to be in an undisturbed state.

Soil samples were collected using a power auger, bucket auger, and garden trowel. Samples were transferred to a stainless steel bowl and thoroughly mixed. Sample material from the bowl was placed in sample bottles using stainless steel spoons (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all soil samples. The procedure included the scrubbing of all equipment with a solution of Alconox detergent and water, and triple-rinsing the equipment with distilled water prior to the collection of each sample (E & E 1987). All soil samples were packaged and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all soil samples were analyzed under the Contract Laboratory Program (CLP) for TCL compounds by NET Bartlett



SOURCE: Ecology and Environment, Inc. 1990.



FIGURE 3-2 ON-SITE SOIL SAMPLING LOCATIONS



3-6

Division of Bartlett, Illinois, and for TAL analytes by Keystone Environmental Resources of Houston, Texas.

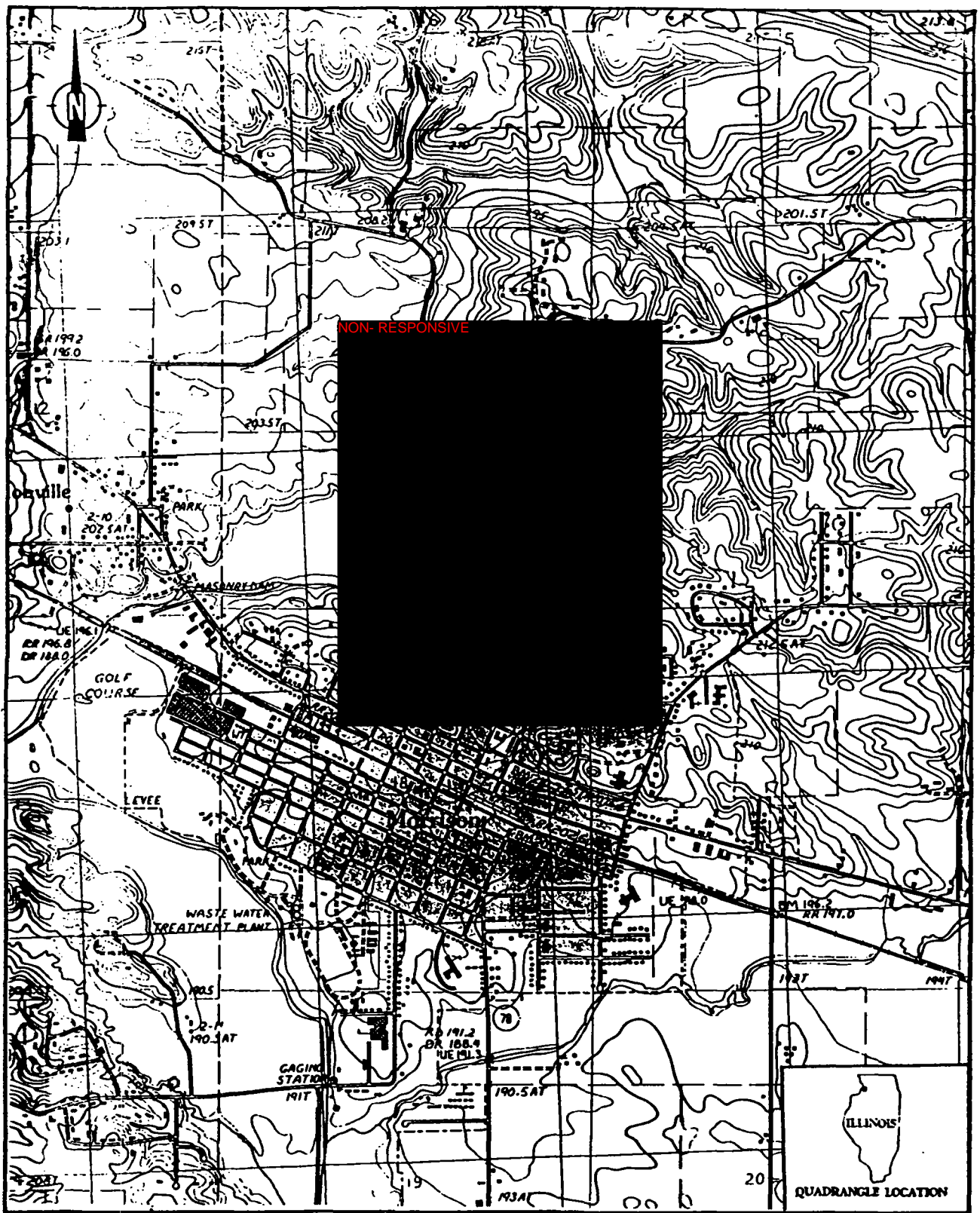
Monitoring Well Sampling Procedures. Monitoring well samples (MW1 and MW2) were collected to determine whether TCL compounds and/or TAL analytes had migrated into groundwater in the vicinity of the site. Sample MW1 was obtained from a well labeled G102D by the city of Morrison, located approximately 1/4 mile southeast of the site (see Figure 3-4 for monitoring well sampling locations). During the purging of MW1, PIT observed air blowing out of the well casing. This airflow was sufficient to lift the well cap off the casing. No readings were observed on health and safety instruments during the venting or purging of MW1. Table 3-1 lists well depths, elevations, and water levels for each monitoring well sampled.

Sample MW2 was obtained from a well (G106D) in the quarry north of the site. While an attempt was made to sample a monitoring well (G103S) on the southeastern side of the site, near the city salt shed, this well was dry.

Five times the standing volume of water was purged from both wells prior to sampling. Wells were purged and sampled using stainless steel bailers attached to dedicated nylon rope. This equipment was washed with Alconox and distilled water, and triple-rinsed with distilled water prior to its use (E & E 1987). In accordance with U.S. EPA quality assurance/quality control (QA/QC) requirements, a duplicate monitoring well sample was collected at sampling location MW1. A distilled water field blank was also collected in accordance with QA/QC requirements.

All monitoring well samples were packaged and shipped in accordance with U.S. EPA-required protocol. As directed by U.S. EPA, monitoring well samples were analyzed for TCL compounds by U.S. EPA Central Regional Laboratory (CRL) in Chicago, Illinois, and for TAL analytes by Keystone Environmental Resources of Houston, Texas.

Residential Well Sampling Procedures. Residential well samples (RW1 through RW3) were also collected to determine whether TCL compounds and/or TAL analytes had migrated from the site into groundwater.



SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, Morrison, IL Quadrangle, 7.5 Minute Series, 1985.

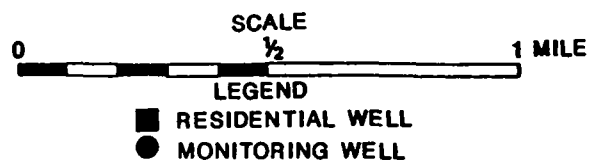


FIGURE 3-4 GROUNDWATER SAMPLING LOCATIONS

Table 3-1
FIT-SAMPLED MONITORING WELL DATA

| Sample | Elevation* (feet) | Well Depth** (feet) | Water Level** (feet) |
|-------------|----------------------|------------------------|-------------------------|
| MW1 (G102D) | 711.7 | 85.60 | 75.75 |
| MW2 (G106D) | 632.4 | 24.60 | 8.88 |

* Well elevations obtained from installation details provided by JM&A, 1987.

** Well depths and water levels measured from the top of the well casing.

Source: Ecology and Environment, Inc. 1990.

The residential well sampling locations were chosen because of their proximity to the site and the availability of private wells for sampling.

Samples RW1 and RW3 were collected from residences approximately 1/2 mile north of the site (see Figure 3-4 for residential well sampling locations). Sample RW2 was obtained from Morrison municipal well #4, located approximately 1/4 mile southeast of the site (see Table 3-2 for addresses of residential well sampling locations).

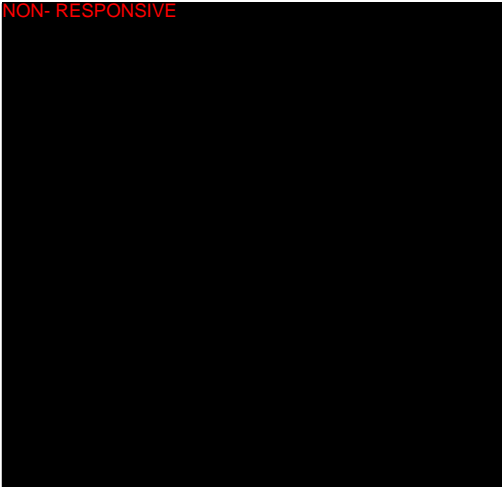
A distilled water field blank and a duplicate residential well sample were also collected in accordance with U.S. EPA QA/QC requirements. The duplicate sample was collected at sampling location RW1.

All residential well samples were obtained from outlets which bypassed water treatment systems and/or storage tanks. The water was allowed to discharge from the outlets for 15 minutes before samples were collected to insure that the samples sources had been purged of standing water (E & E 1987).

All residential well samples were packaged and shipped in accordance with U.S. EPA-required procedures. As directed by U.S. EPA, residential well samples were analyzed for TCL compounds by U.S. EPA CRL of Chicago, Illinois, and for TAL analytes by Versar, Inc., of Springfield, Virginia.

Table 3-2

ADDRESSES OF RESIDENTIAL WELL SAMPLING LOCATIONS

| Sample | Well Depth (feet) | Address |
|-------------------|-------------------|---|
| RW1 and Duplicate | 156 | NON-RESPONSIVE  |
| RW2 | 1,768 | |
| RW3 | unknown | |

Source: Ecology and Environment, Inc. 1990.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes results of chemical analysis of FIT-collected soil samples and residential and monitoring well samples for TCL compounds and TAL analytes.

4.2 RESULTS OF CHEMICAL ANALYSIS OF FIT-COLLECTED SAMPLES

Soil Samples. Chemical analysis of FIT-collected soil samples revealed substances from the following groups of TCL compounds and TAL analytes: halogenated hydrocarbons, aromatics, polyaromatic hydrocarbons (PAHs), metals, heavy metals, cyanide, common laboratory artifacts (toluene, butylbenzylphthalate), and common soil constituents (see Table 4-1 for complete chemical analysis results of FIT-collected soil samples).

Monitoring Well Samples. Analysis of FIT-collected monitoring well samples revealed substances from the following groups of TCL compounds and TAL analytes: sulfur hydrocarbons, halogenated hydrocarbons, heavy metals, common groundwater constituents, and common laboratory artifacts (methylene chloride, toluene, di-n-butylphthalate, and bis[2-ethylhexyl]phthalate) (see Table 4-2 for complete chemical analysis results of FIT-collected monitoring well samples).

Residential Well Samples. Chemical analysis of FIT-collected residential well samples revealed substances from the following groups of TCL compounds and TAL analytes: sulfur hydrocarbons, heavy metals, common groundwater constituents, and common laboratory artifacts (methylene chloride, di-n-butylphthalate, and bis[2-ethylhexyl]phthalate)

(see Table 4-3 for complete chemical analysis results of FIT-collected residential well samples).

U.S. EPA quantitation/detection limits used in the analysis of soil, monitoring well, and residential well samples are provided in Appendix D.

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES

| Sample Collection Information and Parameters | Sample Number | | | | | |
|---|---------------|---------|---------|---------|---------|---------|
| | S1 | S2 | S3 | S4 | S5 | S6 |
| Date | 3/15/89 | 3/15/89 | 3/15/89 | 3/15/89 | 3/15/89 | 3/15/89 |
| Time | 1120 | 1045 | 1215 | 1235 | 1225 | 1300 |
| CLP Organic Traffic Report Number | EZ225 | EZ226 | EZ227 | EZ228 | EZ229 | EZ230 |
| CLP Inorganic Traffic Report Number | MEDH15 | MEDH16 | MEDH17 | MEDH18 | MEDH19 | MEDH20 |
| <u>Compound Detected</u> (values in $\mu\text{g/kg}$) | | | | | | |
| <u>Volatile Organics</u> | | | | | | |
| chloroform | 21 | 23 | 12 | 18 | 9 | 14 |
| bromodichloromethane | 22 | 24 | 12 | 17 | 8 | 15 |
| benzene | — | 2J | — | — | — | — |
| toluene | 4J | 58J | 6J | — | — | 2J |
| <u>Semivolatile Organics</u> | | | | | | |
| fluoranthene | 1,600J | — | — | — | — | 17J |
| pyrene | 1,300J | — | — | — | — | 12J |
| butylbenzylphthalate | — | — | — | — | 11J | 11J |
| benzo[a]pyrene | — | 2,700J | — | — | — | — |
| <u>Analyte Detected</u> (values in mg/kg) | | | | | | |
| aluminum | 3,670 | 2,290 | 4,530 | 3,770 | 4,880 | 6,740 |
| arsenic | 1.8B | 2.2 | 2.8J+ | 2.8 | 4.5J+ | 1.3JBW |
| barium | 160 | 49.4 | 42.4B | 45.6B | 58.4 | 61.6 |
| beryllium | — | 0.4B | — | — | — | 0.39B |
| cadmium | 3.5 | — | — | — | — | — |
| calcium | 63,200 | 81,000 | 53,400 | 53,600 | 30,300 | 7,980 |
| chromium | 301JE | 5JE | 9.4JE | 7.3JE | 10JE | 13.2JE |
| cobalt | 4JBN | 3JBN | 5.4JBN | 6.4JBN | 7JBN | 6JBN |
| copper | 659 | 9.5 | 7.7 | 8.5 | 6.2 | 5.7B |

Table 4-1 (Cont.)

| Sample Collection Information and Parameters | <u>Sample Number</u> | | | | | |
|---|----------------------|----------|----------|----------|----------|----------|
| | S1 | S2 | S3 | S4 | S5 | S6 |
| iron | 8,350JE | 6,180JE | 11,200JE | 10,000JE | 10,400JE | 11,900JE |
| lead | 149JN | 63.3JN | 8.5JN* | 8.4 | 8.1 | 19JN* |
| magnesium | 29,200J* | 43,900J* | 24,200J* | 24,500J* | 13,800J* | 4,650J* |
| manganese | 340JNE | 349JNE | 354JNE | 421JNE | 414JNE | 383JNE |
| mercury | 2 | — | — | — | — | — |
| nickel | 226 | 6.1B | 12.1 | 13.4 | 13.1 | 11 |
| potassium | 387B | — | 168B | — | 160B | 262B |
| silver | 13.5 | — | — | — | — | — |
| sodium | 169B | 126B | 106B | 88.5 | 76B | 58.1B |
| vanadium | 13.8 | 12.8 | 19.7 | 17.9 | 21.2 | 24.8 |
| zinc | 1,120 | 69 | 34.4 | 43.5 | 31.1 | 36.2 |
| cyanide | 18.5 | — | — | — | — | — |

— Not detected.

Table 4-1 (Cont.)

| COMPOUND QUALIFIER | DEFINITION | INTERPRETATION |
|--------------------|-------------------------------|---|
| J | Indicates an estimated value. | Compound value may be semiquantitative. |

| ANALYTE QUALIFIERS | DEFINITION | INTERPRETATION |
|--------------------|---|--|
| E | Estimated or not reported due to interference. See laboratory narrative. | Analyte or element was not detected, or value may be semiquantitative. |
| N | Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative. | Value may be quantitative or semiquantitative. |
| * | Duplicate value outside QC protocols which indicates a possible matrix problem. | Value may be quantitative or semiquantitative. |
| + | Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative. | Data value may be biased. |
| B | Value is real, but is above instrument DL and below CRDL. | Value may be quantitative or semiquantitative. |
| J | Value is above CRDL and is an estimated value because of a QC protocol. | Value may be semiquantitative. |
| W | Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance. | Value may be semiquantitative. |

Source: Ecology and Environment, Inc. 1990.

Table 4-2
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED MONITORING WELL SAMPLES

| Sample Collection Information and Parameters | <u>Sample Number</u> | | | |
|---|----------------------|-----------|-----------|-----------|
| | MW1 | Duplicate | MW2 | Blank |
| Date | 3/14/89 | 3/14/89 | 3/14/89 | 3/14/89 |
| Time | 1630 | 1630 | 1430 | 1530 |
| CRL Log Number | 89FS11S43 | 89FS11D43 | 89FS11S44 | 89FS10R13 |
| CLP Inorganic Traffic Report Number | MEDH29 | MEDH30 | MEDH31 | MEDH32 |
| Temperature (°C) | 10.0 | 10.0 | 9.0 | - |
| Specific Conductivity (µmhos/cm) | 1,000 | 1,000 | 700 | - |
| pH | 6.75 | 6.80 | 6.84 | - |
| <u>Compound Detected</u> | | | | |
| (values in µg/L) | | | | |
| <u>Volatile Organics</u> | | | | |
| methylene chloride | — | 1J | 2 | — |
| carbon disulfide | 2 | 9 | 4 | — |
| chloroform | — | — | 1 | 8 |
| bromodichloromethane | — | — | — | 3 |
| toluene | — | — | — | 1 |
| <u>Semivolatile Organics</u> | | | | |
| di-n-butylphthalate | 27 | 38 | 33 | 6 |
| bis(2-ethylhexyl)phthalate | 2 | 3 | 3 | 2 |
| <u>Analyte Detected</u> | | | | |
| (values in µg/L) | | | | |
| aluminum | 11,500J* | 362J* | 79.3JB* | — |
| arsenic | 16.6 | — | — | — |
| barium | 128JB | 44.8JB | 60JB | — |
| calcium | 141,000J | 89,300J | 119,000J | — |
| chromium | 43.8J* | 10.6J* | — | — |
| cobalt | 10.4B | — | — | — |
| copper | 25.8 | 14.4B | — | 3.7JB |

Table 4-2 (Cont.)

| Sample Collection Information and Parameters | Sample Number | | | |
|---|---------------|-----------|----------|-------|
| | MW1 | Duplicate | MW2 | Blank |
| iron | 18,600J | 321J | — | — |
| lead | 7.1JM | — | — | — |
| magnesium | 68,500J | 40,300J | 51,500J | — |
| manganese | 562 | 5.2B | 10.1B | — |
| nickel | 31.5B | — | 32.2B | — |
| potassium | 1,920B | — | — | — |
| sodium | 17,300JE | 19,400JE | 15,600JE | — |
| vanadium | 30.5B | — | — | — |
| zinc | 122 | 34.8 | 63 | 6.7JB |

— Not detected.

Table 4-2 (Cont.)

| COMPOUND QUALIFIER | DEFINITION | INTERPRETATION |
|--------------------|-------------------------------|---|
| J | Indicates an estimated value. | Compound value may be semiquantitative. |

| ANALYTE QUALIFIERS | DEFINITION | INTERPRETATION |
|--------------------|---|--|
| E | Estimated or not reported due to interference. See laboratory narrative. | Analyte or element was not detected, or value may be semiquantitative. |
| N | Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative. | Value may be quantitative or semi-quantitative. |
| * | Duplicate value outside QC protocols which indicates a possible matrix problem. | Value may be quantitative or semi-quantitative. |
| B | Value is real, but is above instrument DL and below CRDL. | Value may be quantitative or semi-quantitative. |
| J | Value is above CRDL and is an estimated value because of a QC protocol. | Value may be semiquantitative. |

Source: Ecology and Environment, Inc. 1990.

Table 4-3
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED RESIDENTIAL WELL SAMPLES

| Sample Collection Information and Parameters | <u>Sample Number</u> | | | | |
|---|----------------------|-----------|-----------|-----------|-----------|
| | RW1 | Duplicate | RW2 | RW3 | Blank |
| Date | 3/15/89 | 3/15/89 | 3/15/89 | 3/15/89 | 3/15/89 |
| Time | 1000 | 1000 | 1010 | 1030 | 1145 |
| CRL Log Number | 89FS11S45 | 89FS11D45 | 89FS11S46 | 89FS11S47 | 89FS10R14 |
| CLP Inorganic Traffic Report Number | MEDH31 | MEDH22 | MEDH23 | MEDH24 | MEDH28 |
| Temperature (°C) | 8.5 | 8.5 | 11 | 8.5 | — |
| Specific Conductivity (µmhos/cm) | 510 | 510 | 460 | 560 | — |
| pH | 6.64 | 6.64 | 6.82 | 6.50 | — |
| <u>Compound Detected</u> | | | | | |
| (values in µg/L) | | | | | |
| <u>Volatile Organics</u> | | | | | |
| methylene chloride | — | — | 1J | — | — |
| carbon disulfide | — | — | 2 | — | — |
| dibromochloromethane | — | — | — | — | 1 |
| bromoform | — | — | — | — | 1 |
| <u>Semivolatile Organics</u> | | | | | |
| di-n-butylphthalate | 6 | 7 | 4 | 4 | 4 |
| bis(2-ethylhexyl)phthalate | 2 | 2 | 2 | — | — |
| <u>Analyte Detected</u> | | | | | |
| (values in µg/L) | | | | | |
| aluminum | 28B | — | — | — | — |
| arsenic | 5.0B | 4.5B | — | — | — |
| barium | 83.6 | 89.2 | 78.8 | 82.8 | — |
| calcium | 85,800 | 92,300 | 65,200 | 93,600 | 66.2B |
| chromium | — | — | — | 23.9 | — |
| cobalt | — | 5.1B | — | 5.5B | — |
| iron | 5,620 | 5,960 | 33.4B | 19.5B | — |
| lead | — | — | — | 7.0 | — |

Table 4-3 (Cont.)

| Sample Collection Information and Parameters | Sample Number | | | | |
|---|---------------|-----------|--------|--------|--------|
| | RW1 | Duplicate | RW2 | RW3 | Blank |
| magnesium | 37,900 | 38,300 | 31,700 | 40,500 | 13.4B |
| manganese | 29.8 | 28.9 | 2.7B | — | — |
| potassium | 1,140B | 1,520B | 6,140 | 2,080 | 1,130B |
| sodium | 4,340 | 4,630 | 4,760 | 6,740 | 74.4B |
| zinc | 65J | 95.3J | 6.4JB | 26.2J | — |

— Not detected.

| COMPOUND QUALIFIER | DEFINITION | INTERPRETATION |
|--------------------|-------------------------------|---|
| J | Indicates an estimated value. | Compound value may be semiquantitative. |

| ANALYTE QUALIFIERS | DEFINITION | INTERPRETATION |
|--------------------|---|---|
| B | Value is real, but is above instrument DL and below CRDL. | Value may be quantitative or semi-quantitative. |
| J | Value is above CRDL and is an estimated value because of a QC protocol. | Value may be semiquantitative. |

Source: Ecology and Environment, Inc. 1990.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section presents a discussion of data and information that apply to potential migration pathways and targets of TCL compounds and/or TAL analytes that may be attributable to the City Dump site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

The general geology of the area surrounding the City Dump site consists of glacial drift deposits associated with the Illinoian-stage ground moraine. The glacial deposits are underlain by Silurian age dolomite bedrock (Niagaran and Alexandrian formations). The dolomite units are separated from the underlying Cambrian and Ordovician sandstone and dolomite formations by the Maquoketa shale unit (JM&A 1987). According to area well logs (see Appendix E), the Maquoketa shale unit is continuous throughout a 3-mile radius of the site and therefore acts as a confining layer. The glacial deposits and uppermost dolomite bedrock units therefore act as a single aquifer, while the deeper Cambrian and Ordovician formations act as a second aquifer.

The glacial deposits, consisting of fine-grained till, sand, and gravel, combined with Silurian age dolomite bedrock form the first, or shallow, aquifer, which is the aquifer of concern. The glacial deposits are 60 to 120 feet thick in the area of the site. The thickness of the dolomite bedrock ranges from 175 to 225 feet (JM&A 1987).

The second, or deeper, aquifer is used as the source of drinking water for the city of Morrison. However, due to the presence of the confining Maquoketa shale layer, this aquifer is not considered to be the aquifer of concern.

Using United States Geological Survey (USGS) topographic maps of the area of the site, as well as monitoring well water level measurements, groundwater flow direction was determined to be to the northwest, toward Rock Creek. The nearest well is located approximately 1/4 mile southeast of the site.

The population using the aquifer of concern consists of those persons using private residential wells located within a 3-mile radius of the site. Using USGS topographic maps, 551 houses were counted within a 3-mile radius of the site outside the Morrison city limits (USGS 1985). Using 1980 Census information for Whiteside County (U.S. Bureau of the Census 1982), an average of 2.81 persons per household was used to calculate the private residential well target population of approximately 1,545 persons.

Based on the available geological information, a potential does exist for TCL compounds and/or TAL analytes to migrate from the site into groundwater.

TCL compounds and TAL analytes were detected in groundwater within a 1-mile radius of the site. Analytes detected include chromium at 43.8J* µg/L in MW1 and aluminum at 11,500J* µg/L, also in MW1 (see Table 4-2 for qualifier explanations). Chromium was also detected above background concentrations in on-site soil sample S1. However, since MW1 is located upgradient of the site, the presence of chromium in the groundwater may not be attributable to the site. Aluminum was detected in background and on-site soil samples in similar concentrations; therefore, the presence of aluminum in groundwater is probably not attributable to the City Dump site.

Other compounds and analytes detected in groundwater were either groundwater constituents common to the area, were not detected in on-site soil samples collected, or were detected in similar concentrations in both upgradient and downgradient well samples collected; therefore, they may not be attributable to the site.

Other TCL compounds and TAL analytes were detected in on-site soil samples collected. Among these are nickel, which was detected at a concentration of 266 mg/kg in S1, and mercury at 2 mg/kg, also in S1. These analytes were detected in on-site soil samples in concentrations greater than corresponding background soil sample concentrations. Therefore, these compounds and analytes may be used to characterize the waste at the City Dump site.

5.3 SURFACE WATER

No surface water samples were collected as part of the SSI at the City Dump site. The nearest surface water body is Rock Creek, located approximately 1/4 mile northwest of the site. The potential for TCL compounds and/or TAL analytes to migrate from the site to Rock Creek via surface water is minimal because the creek is separated from the site by roads, houses, and other flow impediments.

5.4 AIR

A release of potential contaminants to the air was not documented during the SSI of the City Dump site. During the reconnaissance inspection, FIT site-entry instruments (colorimetric monitoring tubes for cyanide, oxygen meter, explosimeter, OVA 128, and radiation monitor) did not detect levels above background concentrations at the site. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

Due to the presence of TCL compounds and TAL analytes in on-site surface soils, a potential exists for windblown particulates to carry TCL compounds and TAL analytes from the site. The population within a 4-mile radius of the site potentially affected by windblown particulates is approximately 6,604 persons. Using USGS topographic maps (USGS 1985), 713 homes were counted within a 4-mile radius of the site. Using Whiteside County 1980 Census information, an average of 2.81 persons per household was used to calculate a population of 2,004. This figure was added to the population of the city of Morrison (4,600) to determine the total air target population of 6,604 persons.

5.5 FIRE AND EXPLOSION

FIT observations and explosimeter readings indicated no apparent potential for fire and/or explosion at the City Dump site at the time of the SSI.

5.6 DIRECT CONTACT

According to federal, state, and local file information, as reviewed by FIT, no documentation exists of an incident of direct contact with TCL compounds or TAL analytes at the City Dump site. However, since the site is a public baseball field, a potential for the public to come into direct contact with TCL compounds and/or TAL analytes does exist.

According to calculations using USGS topographic maps of the area of the site, the population within a 1-mile radius of the site is approximately 4,329 persons. Using USGS topographic maps (USGS 1985), 158 houses were counted within a 1-mile radius of the site. Using 1980 Census information, an average of 2.81 persons per household was used to calculate a population of 444. A planimeter was used to determine the population of Morrison which lies within a 1-mile radius of the site (3,885). These figures were added to give the total potential target population of approximately 4,329 persons.

6. BIBLIOGRAPHY

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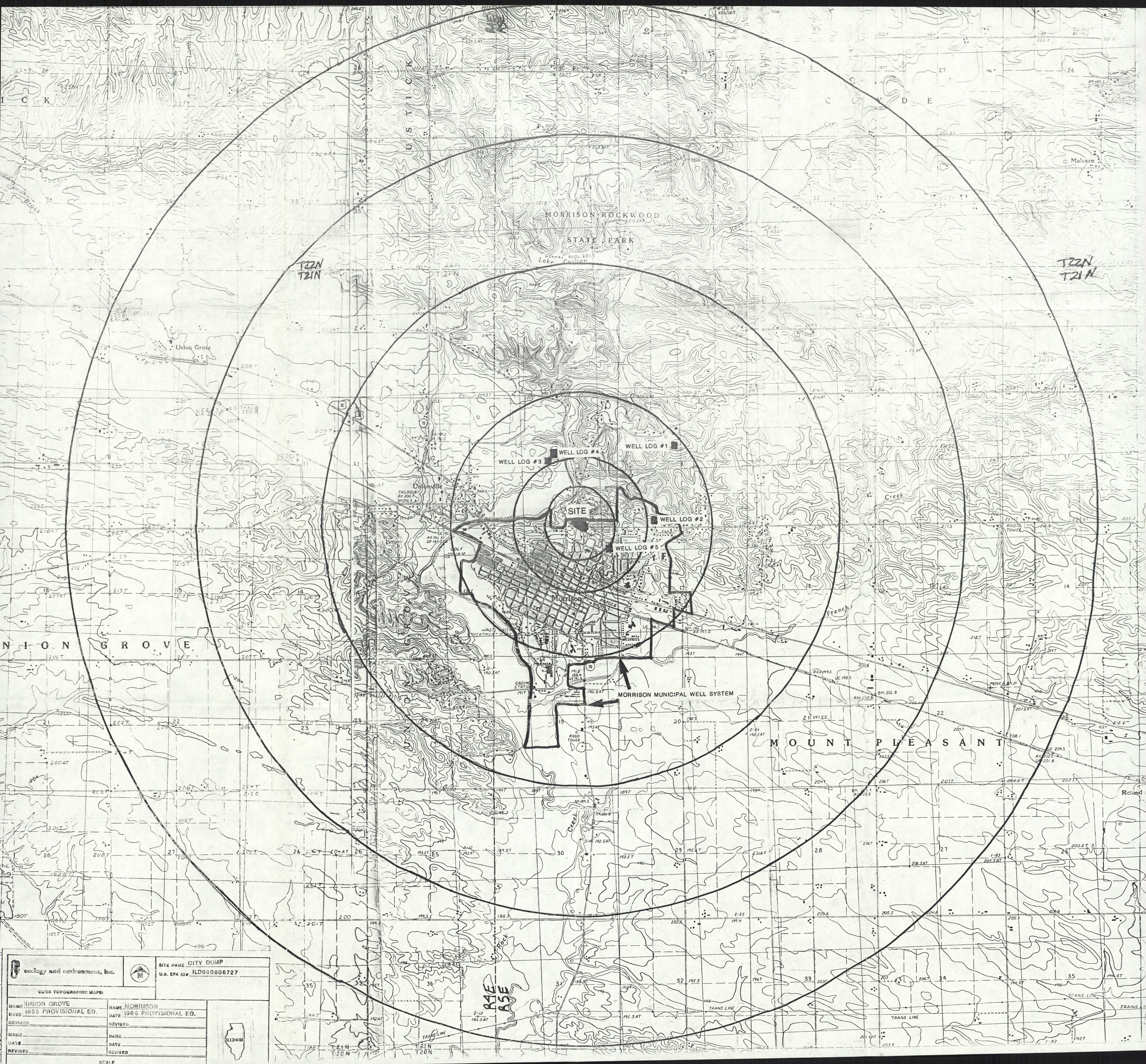
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

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3715:6

APPENDIX A

SITE 4-MILE RADIUS MAP



| | | | |
|---|--|---|--|
|  Ecology and Environment, Inc. | |  U.S. EPA ID# ILD980606727 | |
| USGS TOPOGRAPHIC MAPS: | | | |
| NAME: UNION GROVE | | NAME: MORRISON | |
| DATE: 1985 PROVISIONAL ED. | | DATE: 1985 PROVISIONAL ED. | |
| REVISION: | | REVISION: | |
| NAME: | | NAME: | |
| DATE: | | DATE: | |
| REVISION: | | REVISION: | |
| SCALE | | | |

APPENDIX B

U.S. EPA FORM 2070-13



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D980606727

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) CITY DUMP
02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 700 N. Genessee Avenue
03 CITY MORRISON
04 STATE IL 05 ZIP CODE 61270 06 COUNTY Whiteside
07 COUNTY CODE 195 08 CONG DIST 19
09 COORDINATES LATITUDE 11 18 31.3 LONGITUDE 089 57 18.1
10 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☒ E. MUNICIPAL
☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 3.13.89
02 SITE STATUS
☐ ACTIVE
☒ INACTIVE
03 YEARS OF OPERATION
BEGINNING YEAR 1949 ENDING YEAR 1959
04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR Ecology: Environment, Inc. ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR
☐ E. STATE ☐ F. STATE CONTRACTOR ☐ G. OTHER
05 CHIEF INSPECTOR Karen M. Spangler
06 TITLE Environmental Engineer
07 ORGANIZATION E: E/FIT
08 TELEPHONE NO. (321) 663-9115
09 OTHER INSPECTORS
Ted Nehrkorn Environmental Engineer E: E/FIT (321) 663-9115
William Perpich Water Resource Manager E: E/FIT (321) 663-9115
Regina Bayer Water Chemist E: E/FIT (321) 663-9115
Jeff Dickson Geologist E: E/FIT (321) 663-9115
13 SITE REPRESENTATIVES INTERVIEWED
Sam Tapson City Administrator 200 W. Main Street Morrison, IL (815) 772-7657
George Piersol Mayor 200 W. Main Street Morrison, IL (815) 772-7657

14 TITLE
15 ADDRESS
16 TELEPHONE NO.
17 ACCESS GAINED BY
18 TIME OF INSPECTION
19 WEATHER CONDITIONS
20 INFORMATION AVAILABLE FROM
21 CONTACT
22 PERSON RESPONSIBLE FOR SITE INSPECTION FORM
23 AGENCY
24 ORGANIZATION
25 TELEPHONE NO.
26 DATE

17 ACCESS GAINED BY (Check one)
☒ PERMISSION
☐ WARRANT
18 TIME OF INSPECTION
3/14: 0830-1830
3/15: 0900-1415
19 WEATHER CONDITIONS
3/14: ~35°F, overcast
3/15: ~25°F, overcast, windy
20 INFORMATION AVAILABLE FROM
21 CONTACT Tom Crause
22 PERSON RESPONSIBLE FOR SITE INSPECTION FORM Karen M. Spangler
23 AGENCY U.S. EPA
24 ORGANIZATION E: E/FIT
25 TELEPHONE NO. 312-663-9115
26 DATE 07.21.89
MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D980606727

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
☐ B. POWDER, FINES
☐ C. SLUDGE
☐ D. OTHER Unknown
(Specify)
- ☐ E. SLURRY
☐ F. LIQUID
☐ G. GAS

02 WASTE QUANTITY AT SITE
(Measure of waste quantity must be independent)

TONS Unknown
CUBIC YARDS Unknown
NO. OF DRUMS Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A TOXIC
☐ B CORROSIVE
☐ C RADIOACTIVE
☐ D PERSISTENT
☐ E SOLUBLE
☐ F INFECTIOUS
☐ G FLAMMABLE
☐ H INSTABLE
☐ I HIGHLY VOLATILE
☐ J EXPLOSIVE
☐ K REACTIVE
☐ L INCOMPATIBLE
☐ M NOT APPLICABLE

III. WASTE TYPE

| CATEGORY | SUBSTANCE NAME | 01 GROSS AMOUNT | 02 UNIT OF MEASURE | 03 COMMENTS |
|----------|-------------------------|-----------------|--------------------|-----------------------|
| SLU | SLUDGE | | | |
| OLW | ONLY WASTE | | | |
| SOL | SOLVENTS | Unknown | Unknown | Information on wastes |
| PSD | PESTICIDES | | | deposited on-site is |
| OCC | OTHER ORGANIC CHEMICALS | Unknown | Unknown | unknown. |
| IOC | INORGANIC CHEMICALS | | | |
| ACD | ACIDS | | | |
| BAS | BASES | | | |
| MES | HEAVY METALS | Unknown | Unknown | |

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

| 01 CATEGORY | 02 SUBSTANCE NAME | 03 CAS NUMBER | 04 STORAGE/DISPOSAL METHOD | 05 CONCENTRATION | 06 MEASURE OF CONCENTRATION |
|-------------|----------------------|---------------|----------------------------|------------------|-----------------------------|
| SOL | chloroform | 67-66-3 | Unknown-S2 | 23 | us/kg |
| OCC | bromodichloromethane | 75-27-9 | Unknown-S2 | 24 | us/kg |
| SOL | benzene | 71-43-2 | Unknown-S2 | 2 J | us/kg |
| OCC | benzo[a]pyrene | 50-32-8 | Unknown-S2 | 2,700 J | us/kg |
| OCC | fluoranthene | 206-11-0 | Unknown-S1 | 1,600 J | us/kg |
| OCC | pyrene | 129-00-0 | Unknown-S1 | 1,300 J | us/kg |
| MES | aluminum | 7429-90-5 | Unknown-S5 | 4,880 | mg/kg |
| MES | arsenic | 7440-38-2 | Unknown-S5 | 4.5 J+ | mg/kg |
| MES | barium | 7440-39-3 | Unknown-S1 | 160 | mg/kg |
| MES | beryllium | 7440-41-7 | Unknown-S2 | 0.4 B | mg/kg |
| MES | cadmium | 7440-43-9 | Unknown-S1 | 3.5 | mg/kg |
| MES | calcium | 7440-70-2 | Unknown-S2 | 81,000 | mg/kg |
| MES | chromium | 7440-47-3 | Unknown-S1 | 301 JE | mg/kg |
| MES | cobalt | 7440-48-4 | Unknown-S5 | 7 JBN | mg/kg |
| MES | copper | 7440-50-8 | Unknown-S1 | 659 | mg/kg |
| MES | iron | 7439-89-6 | Unknown-S3 | 11,200 JE | mg/kg |

V. FEEDSTOCKS (See Appendix for CAS Numbers)

| CATEGORY | 01 FEEDSTOCK NAME | 02 CAS NUMBER | CATEGORY | 01 FEEDSTOCK NAME | 02 CAS NUMBER |
|----------|-------------------|---------------|----------|-------------------|---------------|
| FDS | NA | NA | FDS | NA | NA |
| FDS | NA | NA | FDS | NA | NA |
| FDS | NA | NA | FDS | NA | NA |
| FDS | NA | NA | FDS | NA | NA |

VI. SOURCES OF INFORMATION (Can include references, e.g., state files, sample analysis, reports)

E/E/FIT Site Inspection 1989.
E/E/FIT Files, Region V.

* Continued from Part II, Section IV.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS numbers)

[illegible]



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D980606727

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☒ OBSERVED (DATE: 3/11-15/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~1,548 04 NARRATIVE DESCRIPTION
See section 5.2 of narrative.

01 ☐ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
See section 5.3 of narrative.

01 ☒ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~6,601 04 NARRATIVE DESCRIPTION
See section 5.4 of narrative.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
See section 5.5 of narrative.

01 ☒ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~4,329 04 NARRATIVE DESCRIPTION
See section 5.6 of narrative.

01 ☒ F. CONTAMINATION OF SOIL 02 ☒ OBSERVED (DATE: 3/15/89) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ~3 04 NARRATIVE DESCRIPTION
(Acres)
See section 5.2 of narrative.

01 ☒ G. DRINKING WATER CONTAMINATION 02 ☒ OBSERVED (DATE: 3/15/89) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~1,548 04 NARRATIVE DESCRIPTION
See section 5.2 of narrative.

01 ☐ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Not applicable.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~6,601 04 NARRATIVE DESCRIPTION
See sections 5.4 and 5.6 of narrative for details.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D980606727

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

A potential for damage to flora exists since portions of the site are vegetated, and TCL compounds and TAL analytes were detected in on-site soil samples collected.

01 ☒ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION (include names of species)

A potential for damage to fauna exists since the site is located on the north edge of the city of Morrison and open lands are present in the area. TCL compounds and TAL analytes were detected in on-site soils.

01 ☒ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

A potential for contamination of the food chain exists if damage to flora or fauna were to occur.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

(Spills, Runoff, Standing Ponds, Leaking Drums)

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None known.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None known.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None known.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED

04 NARRATIVE DESCRIPTION

The site allegedly operated as a landfill prior to permitting requirements. Solvents may have been dumped directly onto the ground at the site.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

In 1986, during routine testing by IEPA, trichloroethylene (TCE) was discovered in several of the Morrison municipal wells. As a result, 2 wells were shut down, and an investigation was conducted to determine potential sources and the extent of contamination.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~6,609

IV. COMMENTS

No additional comments.

V. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis reports)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region II.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D980606727

II. PERMIT INFORMATION

| 01 TYPE OF PERMIT ISSUED (Check all that apply) | 02 PERMIT NUMBER | 03 DATE ISSUED | 04 EXPIRATION DATE | 05 COMMENTS |
|--|------------------|----------------|--------------------|-------------|
| <input type="checkbox"/> A. NPDES | | | | |
| <input type="checkbox"/> B. UIC | | | | |
| <input type="checkbox"/> C. AIR | | | | |
| <input type="checkbox"/> D. RCRA | | | | |
| <input type="checkbox"/> E. RCRA INTERIM STATUS | | | | |
| <input type="checkbox"/> F. SPOC PLAN | | | | |
| <input type="checkbox"/> G. STATE (Specify) | | | | |
| <input type="checkbox"/> H. LOCAL (Specify) | | | | |
| <input type="checkbox"/> I. OTHER (Specify) | | | | |
| <input checked="" type="checkbox"/> J. NONE | | | | |

III. SITE DESCRIPTION

| 01 STORAGE/DISPOSAL (Check all that apply) | 02 AMOUNT | 03 UNIT OF MEASURE | 04 TREATMENT (Check all that apply) | 05 OTHER |
|---|-----------|--------------------|---|---|
| <input type="checkbox"/> A. SURFACE IMPOUNDMENT | | | <input type="checkbox"/> A. INCINERATION | <input type="checkbox"/> A. BUILDINGS ON SITE |
| <input type="checkbox"/> B. PILES | | | <input type="checkbox"/> B. UNDERGROUND INJECTION | None |
| <input type="checkbox"/> C. DRUMS, ABOVE GROUND | | | <input type="checkbox"/> C. CHEMICAL/PHYSICAL | |
| <input type="checkbox"/> D. TANK, ABOVE GROUND | | | <input type="checkbox"/> D. BIOLOGICAL | |
| <input type="checkbox"/> E. TANK, BELOW GROUND | | | <input type="checkbox"/> E. WASTE OIL PROCESSING | |
| <input checked="" type="checkbox"/> F. LANDFILL | Unknown | Unknown | <input type="checkbox"/> F. SOLVENT RECOVERY | 06 AREA OF SITE |
| <input type="checkbox"/> G. LANDFARM | | | <input type="checkbox"/> G. OTHER RECYCLING/RECOVERY | ~ 3 (Acres) |
| <input type="checkbox"/> H. OPEN DUMP | | | <input checked="" type="checkbox"/> H. OTHER None (Specify) | |
| <input type="checkbox"/> I. OTHER (Specify) | | | | |

07 COMMENTS

The site is believed to have operated as a landfill from 1949-1959. The types of wastes deposited are unknown, but may have included household and industrial wastes.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, Diking, LINERS, BARRIERS, ETC.

No lining is known to have been present at the site. Information on wastes as deposited is unknown although a Notification of Hazardous Waste Site Form (Form 103e) filed by General Electric, Co. indicated that solvents may have been dumped directly onto the ground. The Form 103e was filed in 1981.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS The site is currently used as a ball park and is widely used by the public. TCL compounds and TAL analytes were detected in an on-site surface soil sample collected.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. State files, sample analysis, reports)

E: E/FIT Site Inspection 1989.
E: E/FIT Files, Region IV.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D980606727

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY
(Check as applicable)

SURFACE WELL
COMMUNITY A. ☐ B. ☒
NON-COMMUNITY C. ☐ D. ☒

02 STATUS

ENDANGERED AFFECTED MONITORED
A. ☐ B. ☐ C. ☒
D. ☐ E. ☐ F. ☐

03 DISTANCE TO SITE

A. $\sim 1/4$ (mi)
B. $\sim 1/2$ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING
(Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION
(No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION
(Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER

$\sim 1,548$

03 DISTANCE TO NEAREST DRINKING WATER WELL

$\sim 1/4$ (mi)

04 DEPTH TO GROUNDWATER

$\sim 60-120$ (ft)

05 DIRECTION OF GROUNDWATER FLOW

NW

06 DEPTH TO AQUIFER
OF CONCERN

$\sim 60-120$ (ft)

07 POTENTIAL YIELD
OF AQUIFER

Unknown (gpd)

08 SOLE SOURCE AQUIFER

☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

See section 5.2 of narrative for details.

10 RECHARGE AREA

☒ YES
☐ NO

COMMENTS Recharge through
precipitation infiltration

11 DISCHARGE AREA

☐ YES
☒ NO

COMMENTS Unknown

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION
DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY
IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:

Rock Creek
French Creek
Lake Carlton

AFFECTED

☐
☐
☐

DISTANCE TO SITE

$\sim 1/4$ (mi)
 ~ 1 (mi)
 ~ 2 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE
A. $\sim 1,329$
NO. OF PERSONS

TWO (2) MILES OF SITE
B. $\sim 5,695$
NO. OF PERSONS

THREE (3) MILES OF SITE
C. $\sim 6,601$
NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

~ 0.1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

~ 2008

04 DISTANCE TO NEAREST OFF-SITE BUILDING

~ 0.02 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located on the north side of the city of Morrison, population $\sim 4,600$. The surrounding area is primarily rural and residential in nature. The total population within a 4-mile radius of the site is approximately 6,601 persons.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D9B0606727

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-8} - 10^{-9} cm/sec ☒ B. 10^{-4} - 10^{-6} cm/sec ☐ C. 10^{-4} - 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-8} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK

~ 60-120 (m)

04 DEPTH OF CONTAMINATED SOIL ZONE

Unknown (m)

05 SOIL pH

Unknown

06 NET PRECIPITATION

2 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.6 (in)

08 SLOPE
SITE SLOPE

~ 0 %

DIRECTION OF SITE SLOPE

NA

TERRAIN AVERAGE SLOPE

~ 3 %

09 FLOOD POTENTIAL

SITE IS IN NA YEAR FLOODPLAIN

10

NA ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (3 acre minimum)

ESTUARINE

A. NA (mi)

OTHER

B. 74 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

23 (mi)

ENDANGERED SPECIES: none nearby

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

A. ~ 0.02 (mi)

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVES

B. ~ 0.1 (mi)

AGRICULTURAL LANDS
PRIME AG LAND AG LAND

C. NA (mi) D. ~ 1/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

See Appendix A For 4-mile radius map.

VII. SOURCES OF INFORMATION (For specific references, e.g., State files, sample analyses, reports)

E/E/FIT Site Inspection, 1989
E/E/FIT Files, Region IV.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER DAB0606727

II. SAMPLES TAKEN

| SAMPLE TYPE | 01 NUMBER OF SAMPLES TAKEN | 02 SAMPLES SENT TO | 03 ESTIMATED DATE RESULTS AVAILABLE |
|---------------------------|----------------------------|--|-------------------------------------|
| GROUNDWATER | 2 | TCL: U.S. EPA CRL, Chicago, IL TAL: Keystone Env. Resources, Houston, TX | On File. |
| SURFACE WATER | | | |
| WASTE | | | |
| AIR | | | |
| RUNOFF | | | |
| SPILL | | | |
| SOIL | 6 | TCL: NET Bartlett Div., Bartlett, IL TAL: Keystone Env. Resources, Houston TX | On File. |
| VEGETATION | | | |
| OTHER - Residential Wells | 3 | TCL: U.S. EPA CRL, Chicago, IL TAL: Versar, Inc., Springfield VA | On File. |

III. FIELD MEASUREMENTS TAKEN

| 01 TYPE | 02 COMMENTS |
|-------------------------------------|-------------------------------|
| Color monitoring tubes for cyanide. | No color change. |
| Oxygen meter. | No readings above background. |
| Explosimeter | No readings above background. |
| OVA-12B | No readings above background. |
| Radiation mini-alert | No readings above background. |

IV. PHOTOGRAPHS AND MAPS

| | |
|--|---|
| 01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL | 02 IN CUSTODY OF Ecology & Environment, Inc. <small>(Name of organization or individual)</small> |
| 03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | 04 LOCATION OF MAPS Ecology & Environment, Inc. 111 W. Jackson Blvd. Chicago, IL |

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Monitoring Well Field Data:

| Well # | Depth (Feet)* | Depth to Water (Feet)* |
|--------|---------------|------------------------|
| MW1 | 85.60 | 75.75 |
| MW2 | 24.60 | 8.88 |

* Depths from top of well casing.

VI. SOURCES OF INFORMATION (List specific references, e.g., EPA files, sample analysis reports)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region I.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D980606727

| II. CURRENT OWNER(S) | | | | PARENT COMPANY (if applicable) | | | |
|---|--|----------------|----------------------|---|--|---------------|-------------|
| 01 NAME City of Morrison | | 02 D+B NUMBER | | 08 NAME NA | | 09 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) 200 W. Main Street | | 04 SIC CODE | | 10 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 11 SIC CODE | |
| 05 CITY Morrison | | 06 STATE IL | 07 ZIP CODE 61270 | 12 CITY | | 13 STATE | 14 ZIP CODE |
| 01 NAME NA | | 02 D+B NUMBER | | 08 NAME NA | | 09 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 10 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 11 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 12 CITY | | 13 STATE | 14 ZIP CODE |
| 01 NAME NA | | 02 D+B NUMBER | | 08 NAME NA | | 09 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 10 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 11 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 12 CITY | | 13 STATE | 14 ZIP CODE |
| 01 NAME NA | | 02 D+B NUMBER | | 08 NAME NA | | 09 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 10 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 11 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 12 CITY | | 13 STATE | 14 ZIP CODE |
| III. PREVIOUS OWNER(S) (List most recent first) | | | | IV. REALTY OWNER(S) (if applicable; list most recent first) | | | |
| 01 NAME NA | | 02 D+B NUMBER | | 01 NAME NA | | 02 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 05 CITY | | 06 STATE | 07 ZIP CODE |
| 01 NAME NA | | 02 D+B NUMBER | | 01 NAME NA | | 02 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 05 CITY | | 06 STATE | 07 ZIP CODE |
| 01 NAME NA | | 02 D+B NUMBER | | 01 NAME NA | | 02 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 05 CITY | | 06 STATE | 07 ZIP CODE |
| V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports) | | | | | | | |
| E/E/FIT Site Inspection, 1989. | | | | | | | |
| E/E/FIT Files, Region IV. | | | | | | | |



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 0980606727

II. CURRENT OPERATOR (Provide if different from owner)

OPERATOR'S PARENT COMPANY (if applicable)

| | | | | | | | |
|---|--|--------------------------------------|----------------------|---|--|---------------|-------------|
| 01 NAME City of Morrison | | 02 D+B NUMBER | | 10 NAME NA | | 11 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) 200 W. Main Street | | 04 SIC CODE | | 12 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 13 SIC CODE | |
| 05 CITY Morrison | | 06 STATE IL | 07 ZIP CODE 61270 | 14 CITY / | | 15 STATE | 16 ZIP CODE |
| 08 YEARS OF OPERATION | | 09 NAME OF OWNER City of Morrison | | | | | |

III. PREVIOUS OPERATOR(S) (List most recent first, provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)

| | | | | | | | |
|---|--|-------------------------------------|-------------|---|--|---------------|-------------|
| 01 NAME NA | | 02 D+B NUMBER | | 10 NAME NA | | 11 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 12 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 13 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 14 CITY | | 15 STATE | 16 ZIP CODE |
| 08 YEARS OF OPERATION | | 09 NAME OF OWNER DURING THIS PERIOD | | | | | |

| | | | | | | | |
|---|--|-------------------------------------|-------------|---|--|---------------|-------------|
| 01 NAME NA | | 02 D+B NUMBER | | 10 NAME NA | | 11 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 12 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 13 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 14 CITY | | 15 STATE | 16 ZIP CODE |
| 08 YEARS OF OPERATION | | 09 NAME OF OWNER DURING THIS PERIOD | | | | | |

| | | | | | | | |
|---|--|-------------------------------------|-------------|---|--|---------------|-------------|
| 01 NAME NA | | 02 D+B NUMBER | | 10 NAME NA | | 11 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 04 SIC CODE | | 12 STREET ADDRESS (P.O. Box, RFD #, etc.) | | 13 SIC CODE | |
| 05 CITY | | 06 STATE | 07 ZIP CODE | 14 CITY | | 15 STATE | 16 ZIP CODE |
| 08 YEARS OF OPERATION | | 09 NAME OF OWNER DURING THIS PERIOD | | | | | |

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, records)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region IV.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D980606727

II. ON-SITE GENERATOR

| | | |
|---|----------------------|--|
| 01 NAME NA | 02 D+B NUMBER | |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE | |
| 05 CITY | 06 STATE 07 ZIP CODE | |

III. OFF-SITE GENERATOR(S)

| | | | |
|---|----------------------|---|----------------------|
| 01 NAME NA | 02 D+B NUMBER | 01 NAME NA | 02 D+B NUMBER |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE |
| 05 CITY | 06 STATE 07 ZIP CODE | 05 CITY | 06 STATE 07 ZIP CODE |
| 01 NAME NA | 02 D+B NUMBER | 01 NAME NA | 02 D+B NUMBER |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE |
| 05 CITY | 06 STATE 07 ZIP CODE | 05 CITY | 06 STATE 07 ZIP CODE |

IV. TRANSPORTER(S)

| | | | |
|---|----------------------|---|----------------------|
| 01 NAME NA | 02 D+B NUMBER | 01 NAME NA | 02 D+B NUMBER |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE |
| 05 CITY | 06 STATE 07 ZIP CODE | 05 CITY | 06 STATE 07 ZIP CODE |
| 01 NAME NA | 02 D+B NUMBER | 01 NAME NA | 02 D+B NUMBER |
| 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE | 03 STREET ADDRESS (P.O. Box, RFD #, etc.) | 04 SIC CODE |
| 05 CITY | 06 STATE 07 ZIP CODE | 05 CITY | 06 STATE 07 ZIP CODE |

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region IV.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D980606727

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ D. SPILLED MATERIAL REMOVED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ E. CONTAMINATED SOIL REMOVED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ F. WASTE REPACKAGED

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ G. WASTE DISPOSED ELSEWHERE

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ H. ON SITE BURIAL

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ I. IN SITU CHEMICAL TREATMENT

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ J. IN SITU BIOLOGICAL TREATMENT

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ K. IN SITU PHYSICAL TREATMENT

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ L. ENCAPSULATION

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ M. EMERGENCY WASTE TREATMENT

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ N. CUTOFF WALLS

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ O. EMERGENCY DRINKING/SURFACE WATER DIVERSION

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ P. CUTOFF TRENCHES/SUMP

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____

01 ☐ Q. SUBSURFACE CUTOFF WALL

04 DESCRIPTION

NA

02 DATE _____

03 AGENCY _____



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

| I. IDENTIFICATION | |
|-------------------|----------------|
| 01 STATE | 02 SITE NUMBER |
| IL | D980606727 |

II. PAST RESPONSE ACTIVITIES (Continued)

| | | |
|---|---------------|-----------------|
| 01 <input type="checkbox"/> R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> S. CAPPING/COVERING 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> T. BULK TANKAGE REPAIRED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> V. BOTTOM SEALED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> W. GAS CONTROL 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> X. FIRE CONTROL 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> Y. LEACHATE TREATMENT 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> Z. AREA EVACUATED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> 2. POPULATION RELOCATED 04 DESCRIPTION NA | 02 DATE _____ | 03 AGENCY _____ |
| 01 <input type="checkbox"/> 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION none known. | 02 DATE _____ | 03 AGENCY _____ |

III. SOURCES OF INFORMATION (City specific references, e.g., state files, company analysis, reports)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region IV.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I IDENTIFICATION

01 STATE

02 SITE NUMBER

IL

D980606727

II ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

None known.

III SOURCES OF INFORMATION (cite specific references, e.g., state files, laboratory reports)

E/E/FIT Site Inspection, 1989.
E/E/FIT Files, Region V.

APPENDIX C

FIT SITE PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City Dump

PAGE 1 OF 16

U.S. EPA ID: ILD980606727

TDD: F05-8709-119

PAN: FI2061058



DATE: > 3/14/89 TIME: > 915 DIRECTION OF PHOTOGRAPH: > SW; NW PHOTOGRAPHED BY: > Karen Spangler

WEATHER CONDITIONS: > Overcast, ~ 35°F SAMPLE ID (if applicable): > NA

DESCRIPTION: > View From pitcher's mound of ball field looking southwest
and northwest.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City Dump

PAGE 2 OF 16

U.S. EPA ID: ILD980606727

TDD: F05-8709-119

PAN: FILO61058



DATE: > 3/14/89 TIME: > 915 DIRECTION OF PHOTOGRAPH: > N; NE PHOTOGRAPHED BY: > Karen Sprangler

WEATHER CONDITIONS: > Overcast, ~ 35°F SAMPLE ID (if applicable): > NA

DESCRIPTION: > View From pitcher's mound of ball field looking north and
northeast.

SITE NAME: City Dump

PAGE 3 OF 16

U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FIL06105BDATE: > 3/11/89TIME: > 935DIRECTION OF
PHOTOGRAPH: NEWEATHER
CONDITIONS: > Overcast, ~35°FPHOTOGRAPHED BY: > Karen SpanglerSAMPLE ID
(if applicable): > NADESCRIPTION: > Drainage> Area located on north> side of site, leads> into quarry.>>DATE: > 3/14/89TIME: > 920DIRECTION OF
PHOTOGRAPH: > NortheastWEATHER
CONDITIONS: > Overcast> ~35°FPHOTOGRAPHED BY:
> Karen SpanglerSAMPLE ID
(if applicable): > NADESCRIPTION: > View from north edge of site down> into the quarry area.

SITE NAME: City DumpPAGE 4 OF 16U.S. EPA ID: ILD9180606727 TDD: FO5-8709-119PAN: FIL06105BDATE: > 3/14/89TIME: > 915DIRECTION OF
PHOTOGRAPH:> Northeast

WEATHER

CONDITIONS:

> Overcast> ~ 35°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> NADESCRIPTION: > View from pitcher's mound of ball field.> to the northeast, cemetery in background.DATE: > 3/14/89TIME: > 915DIRECTION OF
PHOTOGRAPH:> Southeast

WEATHER

CONDITIONS:

> Overcast> ~ 35°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> NADESCRIPTION: > View from pitcher's mound of ball field> to the southeast, cemetery in background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City Dump

PAGE 5 OF 16

U.S. EPA ID: ILD980606727 TDD: F05-8709-119

PAN: FILO6105B

DATE: > 3/14/89

TIME: > 920

DIRECTION OF
PHOTOGRAPH:
> Northwest

WEATHER
CONDITIONS:
> Overcast

> ~ 35°F

PHOTOGRAPHED BY:
> Karen Spangler

SAMPLE ID
(if applicable):
> NA



DESCRIPTION: > View from the north edge of site into the
> Quarry entrance; garbage on slope in background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CITY DumpPAGE 6 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO610SBDATE: > 3/15/89TIME: > 1120DIRECTION OF
PHOTOGRAPH:> West

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 51DESCRIPTION: > Soil Sample 51.> Perspective view.DATE: > 3/15/89TIME: > 1120DIRECTION OF
PHOTOGRAPH:> West

WEATHER

CONDITIONS:

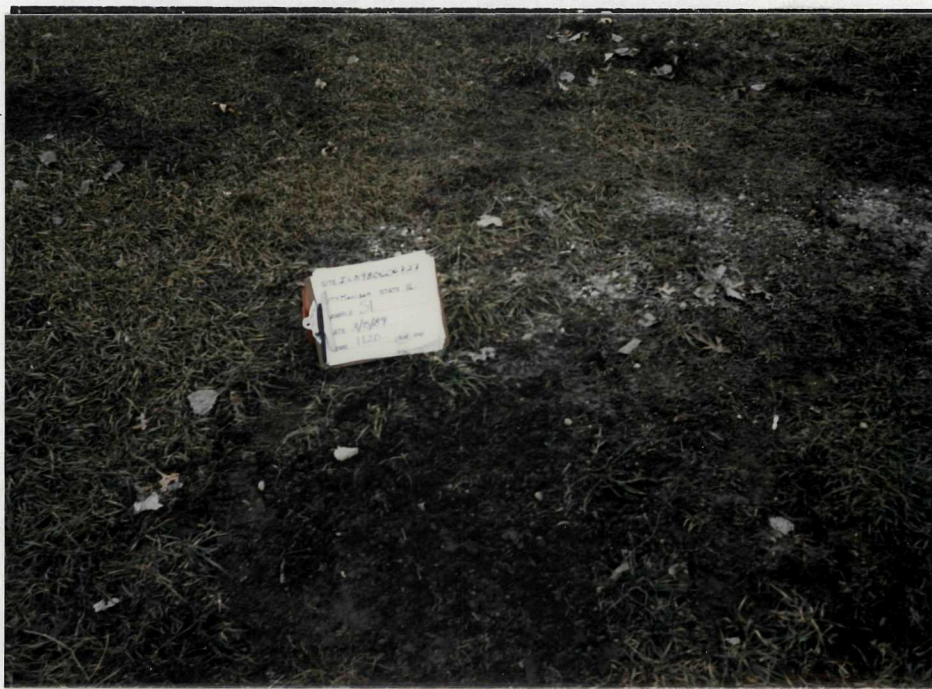
> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 51DESCRIPTION: > Soil Sample 51.> Close-up view. Collected from the east side of the ballpark, at a depth of approximately 4 feet.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CITY Dump

PAGE 7 OF 16

U.S. EPA ID: ILD980606727 TDD: F05-8709-119

PAN: FI20610SB

DATE: > 3/15/89

TIME: > 1045

DIRECTION OF
PHOTOGRAPH:
> Southwest

WEATHER
CONDITIONS:
> Overcast

> ~25°F

PHOTOGRAPHED BY:
> Karen Spangler

SAMPLE ID
(if applicable):
> S2



DESCRIPTION: > Soil Sample S2.

> Perspective view.

DATE: > 3/15/89

TIME: > 1045

DIRECTION OF
PHOTOGRAPH:
> Southwest

WEATHER
CONDITIONS:
> Overcast

> ~25°F

PHOTOGRAPHED BY:
> Karen Spangler

SAMPLE ID
(if applicable):
> S2



DESCRIPTION: > Soil Sample S2.

> Close-up view. Collected from slope on the southeast corner of the site at a depth of approximately 3 feet.

SITE NAME: City DumpPAGE 8 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FI4061053DATE: > 3/15/89TIME: > 1215DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spranger

SAMPLE ID

(if applicable):

> 53DESCRIPTION: > Soil Sample 53.> Perspective view.DATE: > 3/15/89TIME: > 1215DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spranger

SAMPLE ID

(if applicable):

> 53DESCRIPTION: > Soil Sample 53.> Close-up view. Collected at the north edge of the site at a depth of approximately 1.5 feet.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City Dump

PAGE 10 OF 16

U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO6105BDATE: > 3/15/89TIME: > 1225DIRECTION OF
PHOTOGRAPH:> Northeast

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 55DESCRIPTION: > Soil Sample 55.> Perspective view.DATE: > 3/15/89TIME: > 1225DIRECTION OF
PHOTOGRAPH:> Northeast

WEATHER

CONDITIONS:

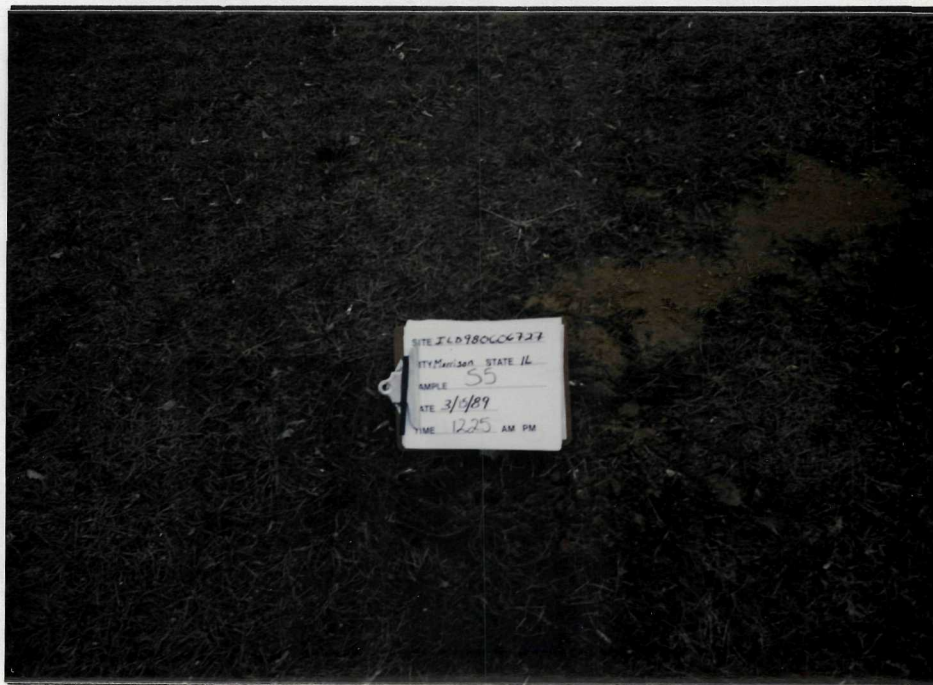
> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 55DESCRIPTION: > Soil Sample 55.> Close-up view. Collected from a sink hole located near center field. Collected at a depth of approximately 6 inches.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CITY DumpPAGE 9 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO6105BDATE: > 3/15/89TIME: > 1235DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

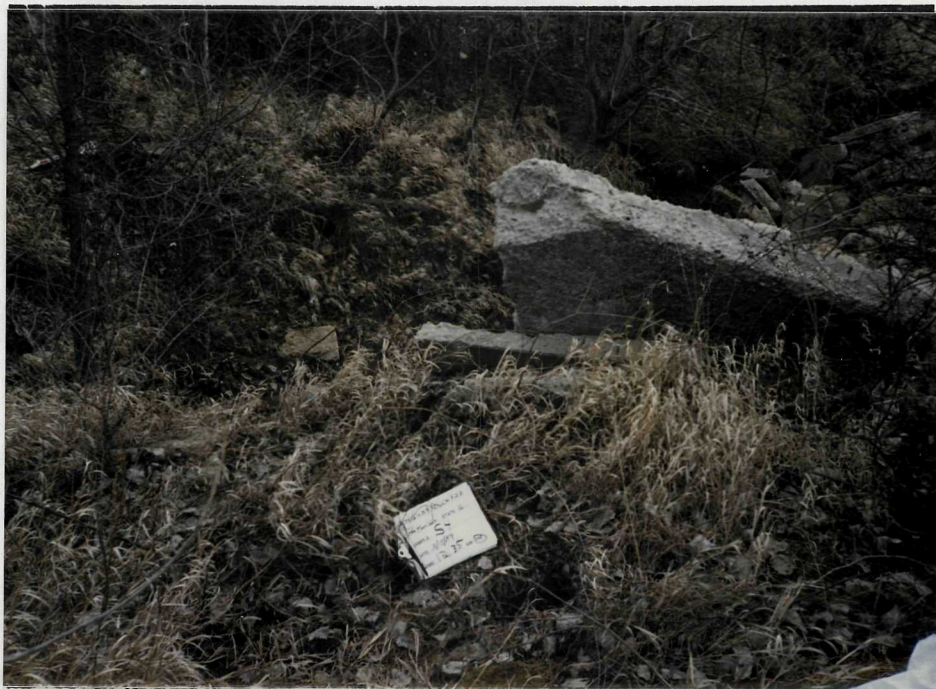
> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> S4DESCRIPTION: > Soil Sample S4.> Perspective view.DATE: > 3/15/89TIME: > 1235DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

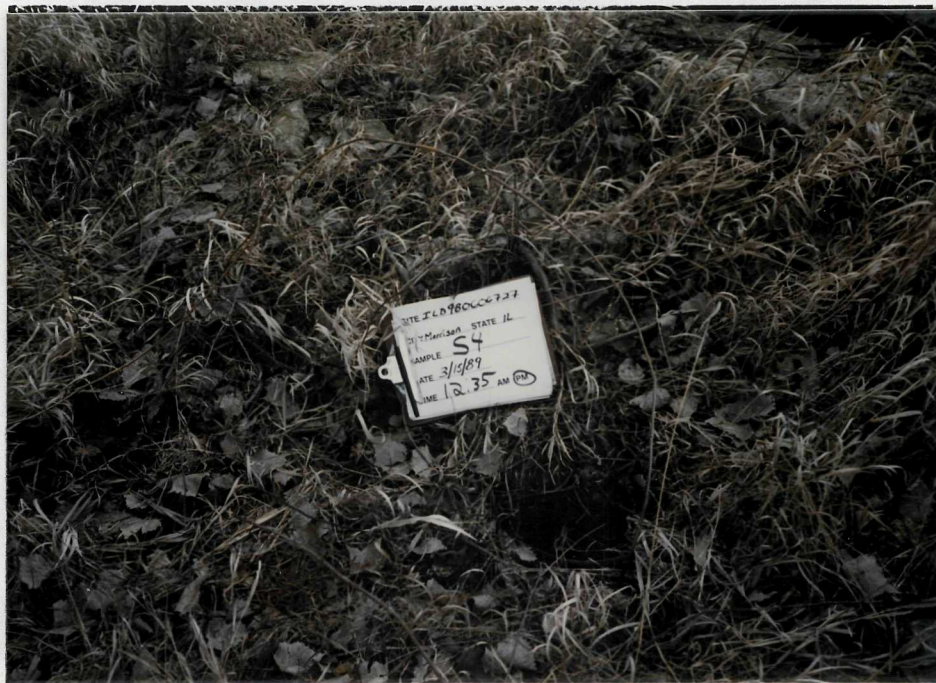
> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> S4DESCRIPTION: > Soil Sample S4.> Close-up view. Collected from a sink hole on the north side of the site. The hole was approximately 4 feet deep.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City Dump

PAGE 12 OF 16

U.S. EPA ID: IL0980606727 TDD: F05-8709-119

PAN: FILO6105B

DATE: > 3/14/89

TIME: > 1630

DIRECTION OF
PHOTOGRAPH:
> Northeast

WEATHER
CONDITIONS:
> Overcast

> ~ 35°F

PHOTOGRAPHED BY:
> Karen Spangler

SAMPLE ID
(if applicable):
> MW1



DESCRIPTION: > Monitoring Well Sample MW1.
> Perspective view.

DATE: > 3/14/89

TIME: > 1630

DIRECTION OF
PHOTOGRAPH:
> Northeast

WEATHER
CONDITIONS:
> Overcast

> ~ 35°F

PHOTOGRAPHED BY:
> Karen Spangler

SAMPLE ID
(if applicable):
> MW1



DESCRIPTION: > Monitoring Well Sample MW1.
> Close-up view.

SITE NAME: City DumpPAGE 11 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO610SBDATE: > 3/15/89TIME: > 1300DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

> Overcast> ~25 °F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 56DESCRIPTION: > Soil Sample 56.> Perspective view.DATE: > 3/15/89TIME: > 1300DIRECTION OF
PHOTOGRAPH:> North

WEATHER

CONDITIONS:

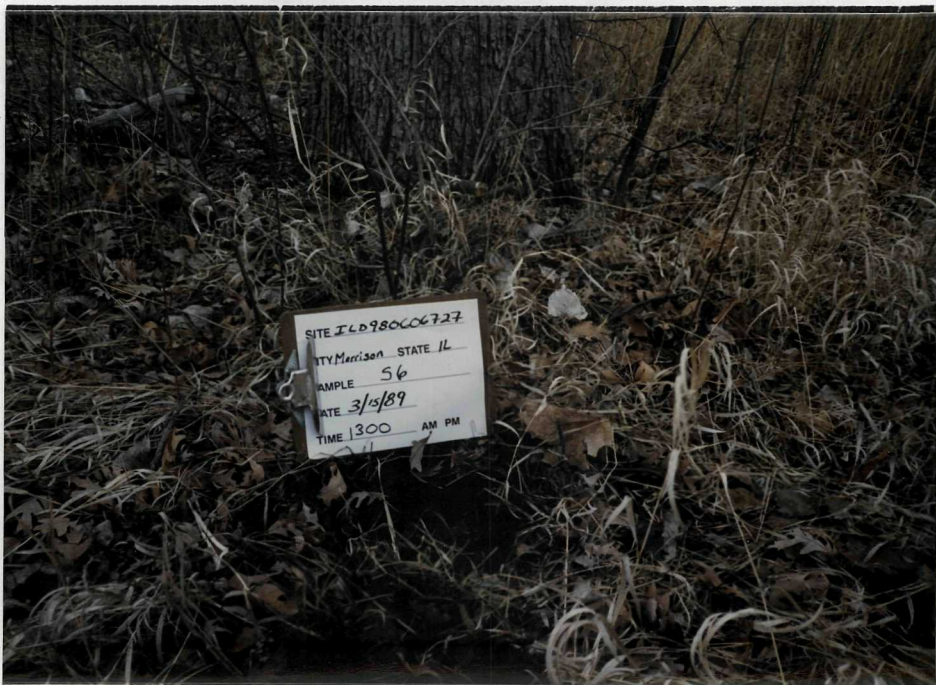
> Overcast> ~25 °F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> 56DESCRIPTION: > Soil Sample 56.> Close-up view. Background soil sample collected from wooded area located south of site. Collected at ~6 inch depth.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City DumpPAGE 13 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO610SBDATE: > 3/14/89TIME: > 1430DIRECTION OF
PHOTOGRAPH:> Northeast

WEATHER

CONDITIONS:

> Overcast> ~35°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> MWZDESCRIPTION: > Monitoring Well Sample MWZ.> Perspective view.DATE: > 3/14/89TIME: > 1430DIRECTION OF
PHOTOGRAPH:> Northeast

WEATHER

CONDITIONS:

> Overcast> ~35°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> MWZDESCRIPTION: > Monitoring Well Sample MWZ.> Close-up view.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City DumpPAGE 14 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FI40610SBDATE: > 3/15/89TIME: > 1000DIRECTION OF
PHOTOGRAPH:
> WestWEATHER
CONDITIONS:
> Overcast> ~25°FPHOTOGRAPHED BY:
> Karen SpanglerSAMPLE ID
(if applicable):
> RW1DESCRIPTION: > Residential Well Sample RW1.> Perspective view.DATE: > 3/15/89TIME: > 1000DIRECTION OF
PHOTOGRAPH:
> WestWEATHER
CONDITIONS:
> Overcast> ~25°FPHOTOGRAPHED BY:
> Karen SpanglerSAMPLE ID
(if applicable):
> RW1DESCRIPTION: > Residential Well Sample RW1.> Close-up view.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: City DumpPAGE 15 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FILO6105BDATE: > 3/15/89

NON-RESPONSIVE

TIME: > 1010DIRECTION OF
PHOTOGRAPH:> East

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> RWZ

DESCRIPTION:

NON-RESPONSIVE

>DATE: > 3/15/89

NON-RESPONSIVE

TIME: > 1010DIRECTION OF
PHOTOGRAPH:> East

WEATHER

CONDITIONS:

> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen Spangler

SAMPLE ID

(if applicable):

> RWZDESCRIPTION: > Residential Well Sample RWZ.> Close-up view.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CITY DumpPAGE 16 OF 16U.S. EPA ID: ILD980606727 TDD: F05-8709-119PAN: FIL06105BDATE: > 3/15/89TIME: > 1030DIRECTION OF
PHOTOGRAPH:> SouthwestWEATHER
CONDITIONS:> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen SpangleSAMPLE ID
(if applicable):> RW3DESCRIPTION: > Residential Well Sample RW3.> Perspective view.DATE: > 3/15/89TIME: > 1030DIRECTION OF
PHOTOGRAPH:> NorthWEATHER
CONDITIONS:> Overcast> ~25°F

PHOTOGRAPHED BY:

> Karen SpangleSAMPLE ID
(if applicable):> RW3DESCRIPTION: > F> Close-up view.

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND
TARGET ANALYTE LIST
QUANTITATION/DETECTION LIMITS

ADDENDUM A

**ROUTINE ANALYTICAL SERVICES
CONTRACT REQUIRED DETECTION AND QUANTITATION LIMITS**

Contract Laboratory Program
Target Compound List
Quantitation Limits

| COMPOUND | CAS # | WATER | SOIL SEDIMENT SLUDGE |
|----------------------------|------------|---------|----------------------------|
| Chloromethane | 74-87-3 | 10 ug/L | 10 ug/Kg |
| Bromomethane | 74-83-9 | 10 | 10 |
| Vinyl chloride | 75-01-4 | 10 | 10 |
| Chloroethane | 75-00-3 | 10 | 10 |
| Methylene chloride | 75-09-2 | 5 | 5 |
| Acetone | 67-64-1 | 10 | 5 |
| Carbon disulfide | 75-15-0 | 5 | 5 |
| 1,1-dichloroethene | 75-35-4 | 5 | 5 |
| 1,1-dichloroethane | 75-34-3 | 5 | 5 |
| 1,2-dichloroethene (total) | 540-59-0 | 5 | 5 |
| Chloroform | 67-66-3 | 5 | 5 |
| 1,2-dichloroethane | 107-06-2 | 5 | 5 |
| 2-butanone (MEK) | 78-93-3 | 10 | 10 |
| 1,1,1-trichloroethane | 71-55-6 | 5 | 5 |
| Carbon tetrachloride | 56-23-5 | 5 | 5 |
| Vinyl acetate | 108-05-4 | 10 | 10 |
| Bromodichloromethane | 75-27-4 | 5 | 5 |
| 1,2-dichloropropane | 78-87-5 | 5 | 5 |
| cis-1,3-dichloropropene | 10061-01-5 | 5 | 5 |
| Trichloroethene | 79-01-6 | 5 | 5 |
| Dibromochloromethane | 124-48-1 | 5 | 5 |
| 1,1,2-trichloroethane | 79-00-5 | 5 | 5 |
| Benzene | 71-43-2 | 5 | 5 |
| Trans-1,3-dichloropropene | 10061-02-6 | 5 | 5 |
| Bromoform | 75-25-2 | 5 | 5 |
| 4-Methyl-2-pentanone | 108-10-1 | 10 | 10 |
| 2-Hexanone | 591-78-6 | 10 | 10 |
| Tetrachloroethene | 127-18-4 | 5 | 5 |
| Toluene | 108-88-3 | 5 | 5 |
| 1,1,2,2-tetrachloroethane | 79-34-5 | 5 | 5 |
| Chlorobenzene | 108-90-7 | 5 | 5 |
| Ethyl benzene | 100-41-4 | 5 | 5 |
| Styrene | 100-42-5 | 5 | 5 |
| Xylenes (total) | 1330-20-7 | 5 | 5 |

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

| COMPOUND | CAS # | WATER | SOIL SEDIMENT SLUDGE |
|------------------------------|-----------|---------|----------------------------|
| Phenol | 108-95-2 | 10 ug/L | 330 ug/Kg |
| bis(2-Chloroethyl) ether | 111-44-4 | 10 | 330 |
| 2-Chlorophenol | 95-57-8 | 10 | 330 |
| 1,3-Dichlorobenzene | 541-73-1 | 10 | 330 |
| 1,4-Dichlorobenzene | 106-46-7 | 10 | 330 |
| Benzyl Alcohol | 100-51-6 | 10 | 330 |
| 1,2-Dichlorobenzene | 95-50-1 | 10 | 330 |
| 2-Methylphenol | 95-48-7 | 10 | 330 |
| bis(2-Chloroisopropyl) ether | 108-60-1 | 10 | 330 |
| 4-Methylphenol | 106-44-5 | 10 | 330 |
| N-Nitroso-di-n-dipropylamine | 621-64-7 | 10 | 330 |
| Hexachloroethane | 67-72-1 | 10 | 330 |
| Nitrobenzene | 98-95-3 | 10 | 330 |
| Isophorone | 78-59-1 | 10 | 330 |
| 2-Nitrophenol | 88-75-5 | 10 | 330 |
| 2,4-Dimethylphenol | 105-67-9 | 10 | 330 |
| Benzoic Acid | 65-85-0 | 50 | 1600 |
| bis(2-Chloroethoxy) methane | 111-91-1 | 10 | 330 |
| 2,4-Dichlorophenol | 120-83-2 | 10 | 330 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 10 | 330 |
| Naphthalene | 91-20-3 | 10 | 330 |
| 4-Chloroaniline | 106-47-8 | 10 | 330 |
| Hexachlorobutadiene | 87-68-3 | 10 | 300 |
| 4-Chloro-3-methylphenol | 59-50-7 | 10 | 330 |
| 2-Methylnaphthalene | 91-57-6 | 10 | 330 |
| Hexachlorocyclopentadiene | 77-47-4 | 10 | 330 |
| 2,4,6-Trichlorophenol | 88-06-2 | 10 | 330 |
| 2,4,5-Trichlorophenol | 95-95-4 | 50 | 1600 |
| 2-Chloronaphthalene | 91-58-7 | 10 | 330 |
| 2-Nitroaniline | 88-74-4 | 50 | 1600 |
| Dimethylphthalate | 131-11-3 | 10 | 330 |
| Acenaphthylene | 208-96-8 | 10 | 330 |
| 2,6-Dinitrotoluene | 606-20-2 | 10 | 330 |
| 3-Nitroaniline | 99-09-2 | 50 | 1600 |
| Acenaphthene | 83-32-9 | 10 | 330 |
| 2,4-Dinitrophenol | 51-28-5 | 50 | 1600 |
| 4-Nitrophenol | 100-02-7 | 50 | 1600 |
| Dibenzofuran | 132-64-9 | 10 | 330 |
| 2,4-Dinitrotoluene | 121-14-2 | 10 | 330 |
| Diethylphthalate | 84-66-2 | 10 | 330 |
| 4-Chlorophenyl-phenyl ether | 7005-72-3 | 10 | 330 |

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

| COMPOUND | CAS # | WATER | SOIL SLUDGE SEDIMENT |
|----------------------------|----------|---------|----------------------------|
| Fluorene | 86-73-7 | 10 ug/L | 330 ug/Kg |
| 4-Nitroaniline | 100-01-6 | 50 | 1600 |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | 50 | 1600 |
| N-nitrosodiphenylamine | 86-30-6 | 10 | 330 |
| 4-Bromophenyl-phenylether | 101-55-3 | 10 | 330 |
| Hexachlorobenzene | 118-74-1 | 10 | 330 |
| Pentachlorophenol | 87-86-5 | 50 | 1600 |
| Phenanthrene | 85-01-8 | 10 | 330 |
| Anthracene | 120-12-7 | 10 | 330 |
| Di-n-butylphthalate | 84-74-2 | 10 | 330 |
| Fluoranthene | 206-44-0 | 10 | 330 |
| Pyrene | 129-00-0 | 10 | 330 |
| Butylbenzylphthalate | 85-68-7 | 10 | 330 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 20 | 660 |
| Benzo(a)anthracene | 56-55-3 | 10 | 330 |
| Chrysene | 218-01-9 | 10 | 330 |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | 10 | 330 |
| Di-n-octylphthalate | 117-84-0 | 10 | 330 |
| Benzo(b)fluoranthene | 205-99-2 | 10 | 330 |
| Benzo(k)fluoranthene | 207-08-9 | 10 | 330 |
| Benzo(a)pyrene | 50-32-8 | 10 | 330 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 10 | 330 |
| Dibenz(a,h)anthracene | 53-70-3 | 10 | 330 |
| Benzo(g,h,i)perylene | 191-24-2 | 10 | 330 |

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

| COMPOUND | CAS # | WATER | SOIL |
|------------------------|------------|-----------|--------------------|
| | | | SEDIMENT SLUDGE |
| alpha-BHC | 319-84-6 | 0.05 ug/L | 8 ug/Kg |
| beta-BHC | 319-85-7 | 0.05 | 8 |
| delta-BHC | 319-86-8 | 0.05 | 8 |
| gamma-BHC (Lindane) | 58-89-9 | 0.05 | 8 |
| Heptachlor | 76-44-8 | 0.05 | 8 |
| Aldrin | 309-00-2 | 0.05 | 8 |
| Heptachlor epoxide | 1024-57-3 | 0.05 | 8 |
| Endosulfan I | 959-98-8 | 0.05 | 8 |
| Dieldrin | 60-57-1 | 0.10 | 16 |
| 4,4'-DDE | 72-55-9 | 0.10 | 16 |
| Endrin | 72-20-8 | 0.10 | 16 |
| Endosulfan II | 33213-65-9 | 0.10 | 16 |
| 4,4'-DDD | 72-54-8 | 0.10 | 16 |
| Endosulfan sulfate | 1031-07-8 | 0.10 | 16 |
| 4,4'-DDT | 50-29-3 | 0.10 | 16 |
| Methoxychlor (Mariate) | 72-43-5 | 0.5 | 80 |
| Endrin ketone | 53494-70-5 | 0.10 | 16 |
| alpha-Chlordane | 5103-71-9 | 0.5 | 80 |
| gamma-chlordane | 5103-74-2 | 0.5 | 80 |
| Toxaphene | 8001-35-2 | 1.0 | 160 |
| AROCLOR-1016 | 12674-11-2 | 0.5 | 80 |
| AROCLOR-1221 | 11104-28-2 | 0.5 | 80 |
| AROCLOR-1232 | 11141-16-5 | 0.5 | 80 |
| AROCLOR-1242 | 53469-21-9 | 0.5 | 80 |
| AROCLOR-1248 | 12672-29-6 | 0.5 | 80 |
| AROCLOR-1254 | 11097-69-1 | 1.0 | 160 |
| AROCLOR-1260 | 11096-82-5 | 1.0 | 160 |

Table A
Contract Laboratory Program
Target Analyte List
Inorganic Quantitation Limits

| COMPOUND | PROCEDURE | SOIL WATER | SEDIMENT SLUDGE |
|-----------|------------|---------------|--------------------|
| Aluminum | ICP | 200 ug/L | 40 mg/Kg |
| Antimony | Furnace | 60 | 2.4 |
| Arsenic | Furnace | 10 | 2 |
| Barium | ICP | 200 | 40 |
| Beryllium | ICP | 5 | 1 |
| Cadmium | ICP | 5 | 1 |
| Calcium | ICP | 5000 | 1000 |
| Chromium | ICP | 10 | 2 |
| Cobalt | ICP | 50 | 10 |
| Copper | ICP | 25 | 5 |
| Iron | Icp | 100 | 20 |
| Lead | Furnace | 5 | 1 |
| Magnesium | ICP | 5000 | 1000 |
| Manganese | ICP | 15 | 3 |
| Mercury | Cold Vapor | 0.2 | 0.008 |
| Nickel | ICP | 40 | 8 |
| Potassium | ICP | 5000 | 1000 |
| Selenium | Furnace | 5 | 1 |
| Silver | ICP | 10 | 2 |
| Sodium | ICP | 5000 | 1000 |
| Thallium | Furnace | 10 | 2 |
| Vanadium | ICP | 50 | 10 |
| Zinc | ICP | 20 | 4 |
| Cyanide | Color | 10 | 2 |

ADDENDUM B

**CENTRAL REGIONAL LABORATORY
DETECTION LIMITS**

TABLE B
CENTRAL REGIONAL LABORATORY
VOLATILE DETECTION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT IN REAGENT WATER |
|---------------------------|------------|-------------------------------------|
| Benzene | 71-43-2 | 1.5 ug/L |
| Bromodichloromethane | 75-27-4 | 1.5 |
| Bromoform | 75-25-2 | 1.5 |
| Bromomethane | 74-83-9 | 10 |
| Carbon tetrachloride | 56-23-5 | 1.5 |
| Chlorobenzene | 108-90-7 | 1.5 |
| Chloroethane | 75-00-3 | 1.5 |
| 2-Chloroethyl vinyl ether | 110-75-8 | 1.5 |
| Chloroform | 67-66-3 | 1.5 |
| Chloromethane | 74-87-3 | 10 |
| Dibromochloromethane | 124-48-1 | 1.5 |
| 1,1-dichloroethane | 75-34-3 | 1.5 |
| 1,2-dichloroethane | 107-06-2 | 1.5 |
| 1,1-dichloroethene | 75-35-4 | 1.5 |
| Total-1,2-dichloroethene | 540-59-0 | 1.5 |
| 1,2-dichloropropane | 78-87-5 | 1.5 |
| cis-1,3-dichloropropene | 10061-01-5 | 2 |
| trans-1,3-dichloropropene | 10061-02-6 | 1 |
| Ethyl benzene | 100-41-4 | 1.5 |
| Methylene chloride* | 75-09-2 | 1 |
| 1,1,2,2-tetrachloroethane | 79-34-5 | 1.5 |
| Tetrachloroethene | 127-18-4 | 1.5 |
| Toluene* | 108-88-3 | 1.5 |
| 1,1,1-trichloroethane | 71-55-6 | 1.5 |
| 1,1,2-trichloroethane | 79-00-5 | 1.5 |
| Trichloroethene | 79-01-6 | 1.5 |
| Vinyl chloride | 75-01-4 | 10 |
| Acrolein | 107-02-8 | 100 |
| Acetone* | 67-64-1 | 75 |
| Acrylonitrile | 107-13-1 | 50 |
| Carbon disulfide | 75-15-0 | 3 |
| 2-butanone | 78-93-3 | (50) |
| Vinyl acetate | 108-05-4 | 15 |
| 4-Methyl-2-Pentanone | 108-10-1 | (3) |
| 2-Hexanone | 519-78-6 | (50) |
| Styrene | 100-42-5 | 1 |
| m-xylene | 108-38-3 | 2 |
| o-xylene** | 95-47-6 | |
| p-xylene** | 106-42-3 | 2.5** |
| Total Xylene | 1330-02-7 | |

* Common Laboratory Solvents.

Blank Limit is 5X Method Detection Limit.

() Values in parentheses are estimates.

Actual values are being determined at this time.

** The o-xylene and p-xylene are reported as a total of the two.

TABLE B (cont.)
CRL
SEMIVOLATILE DETECTION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT | BLANK LIMIT |
|------------------------------|------------|--------------------|----------------|
| Aniline | 62-53-3 | 1.5 ug/L | 3 ug/L |
| Bis(2-chloroethyl)ether | 111-44-4 | 1.5 | 3 |
| Phenol | 108-95-2 | 2 | 4 |
| 2-Chlorophenol | 95-57-8 | 2 | 4 |
| 1,3-Dichlorobenzene | 541-73-1 | 2 | 4 |
| 1,4-Dichlorobenzene | 106-46-7 | 2 | 4 |
| 1,2-Dichlorobenzene | 95-50-1 | 2.5 | 5 |
| Benzyl alcohol | 100-51-6 | 2 | 4 |
| Bis(2-chloroisopropyl) ether | 39638-32-9 | 2.5 | 5 |
| 2-Methylphenol | 95-48-7 | 1 | 2 |
| Hexachloroethane | 67-72-1 | 2 | 4 |
| N-nitrosodipropylamine | 621-64-7 | 1.5 | 3 |
| Nitrobenzene | 98-95-3 | 2.5 | 5 |
| 4-Methylphenol | 106-44-5 | 1 | 2 |
| Isophorone | 78-59-1 | 2.5 | 5 |
| 2-Nitrophenol | 88-75-5 | 2 | 4 |
| 2,4-Dimethylphenol | 105-67-9 | 2 | 4 |
| Bis(2-chloroethoxy)methane | 111-91-1 | 2.5 | 5 |
| 2,4-Dichlorophenol | 120-83-2 | 2 | 4 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 2 | 4 |
| Naphthalene | 91-20-3 | 2 | 4 |
| 4-Chloroaniline | 106-47-8 | 2 | 4 |
| Hexachlorobutadiene | 87-68-3 | 2.5 | 5 |
| Benzoic acid | 65-85-0 | (30) | (60) |
| 2-Methylnapthalene | 91-57-6 | 2 | 4 |
| 4-Chloro-3-methylphenol | 59-50-7 | 1.5 | 3 |
| Hexachlorocyclopentadiene | 77-47-4 | 2 | 4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 1.5 | 3 |
| 2,4,5-Trichlorophenol | 95-95-4 | 1.5 | 3 |
| 2-Chloronapthalene | 91-58-7 | 1.5 | 3 |
| Acenaphthylene | 208-96-8 | 1.5 | 3 |
| Dimethyl phthalate | 131-11-3 | 1.5 | 3 |
| 2,6-Dinitrotoluene | 606-20-2 | 1 | 2 |
| Acenaphthene | 83-32-9 | 1.5 | 3 |
| 3-Nitroaniline | 99-09-2 | 2.5 | 5 |
| Dibenzofuran | 132-64-9 | 1 | 2 |
| 2,4-Dinitrophenol | 51-28-5 | (15) | (30) |
| 2,4-Dinitrotoluene | 121-14-2 | 1 | 2 |
| cont. | | | |

TABLE B (Cont.)
CRL
SEMIVOLATILE DETECTION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT | BLANK (a) LIMIT |
|-----------------------------|-----------|--------------------|--------------------|
| Fluorene | 86-73-7 | 1 ug/L | 2 ug/L |
| 4-Nitrophenol | 100-02-7 | 1.5 | 3 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | 1 | 2 |
| Diethylphthalate | 84-66-2 | 1 | 2 |
| 4,6-dinitro-2-methylphenol | 534-52-1 | (15) | (30) |
| 1,2-Diphenylhydrazine | 122-66-7 | 1 | 2 |
| n-Nitrosodiphenylamine * | 86-30-6 | | |
| Diphenylamine * | 122-39-4 | 1.5 | 3 |
| 4-Nitroaniline | 100-01-6 | 3 | 6 |
| 4-Bromophenyl-phenylether | 101-55-3 | 1.5 | 3 |
| Hexachlorobenzene | 118-74-1 | 1.5 | 3 |
| Pentachlorophenol | 87-86-5 | 2 | 4 |
| Phenanthrene | 85-01-8 | 1 | 2 |
| Anthracene | 120-12-7 | 2.5 | 5 |
| Di-n-butylphthalate | 84-74-2 | 2 | 4 |
| Fluoranthene | 206-44-0 | 1.5 | 3 |
| Pyrene | 129-00-0 | 1.5 | 3 |
| Butylbenzylphthalate | 85-68-7 | 3.5 | 7 |
| Chrysene ** | 218-01-9 | | |
| Benzo(a)anthracene ** | 56-55-3 | 1.5 | 3 |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | 1 | 2 |
| Di-n-octyl phthalate | 117-84-0 | 1.5 | 3 |
| Benzo(b)fluoranthene *** | 205-99-2 | | |
| Benzo(k)fluoranthene *** | 207-08-9 | 1.5 | 3 |
| Benzo(a)pyrene | 50-32-8 | 2 | 4 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 3.5 | 7 |
| Dibenzo(a,h)anthracene | 53-70-3 | 2.5 | 5 |
| Benzo(g,h,i)perylene | 191-24-2 | 4 | 8 |
| 2-Nitroaniline | 88-74-4 | 1 | 2 |

* These two parameters are reported as a total.

** These two parameters are reported as a total.

*** These two parameters are reported as a total.

(a) If the blank limit is exceeded, the sample is reextracted and rerun.

() Values in parentheses are estimates.

The actual values are being determined at this time.

Note: Limits are for reagent water.

TABLE B (Cont.)
CRL
PESTICIDE AND PCB DETECTION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT |
|--------------------|------------|--------------------|
| Aldrin | 309-00-2 | 0.005 ug/L |
| alpha BHC | 319-84-6 | (0.010) |
| beta BHC | 319-85-7 | (0.005) |
| delta BHC | 319-86-8 | (0.005) |
| gama BHC (Lindane) | 58-89-9 | 0.005 |
| Chlordane | 57-74-8 | (0.020) |
| 4,4'-DDD | 72-54-8 | (0.020) |
| 4,4'-DDE | 72-55-9 | (0.005) |
| 4,4'-DDT | 50-29-3 | 0.020 |
| Dieldrin | 60-57-1 | 0.010 |
| Endosulfan I | 959-98-8 | 0.010 |
| Endosulfan II | 33213-65-9 | 0.010 |
| Endosulfan sulfate | 1031-07-8 | (0.10) |
| Endrin | 72-20-8 | 0.010 |
| Endrin aldehyde | 7421-93-4 | (0.030) |
| Endrin ketone | 53494-70-5 | (0.030) |
| Heptachlor | 76-44-8 | 0.030 |
| Heptachlor epoxide | 1024-57-3 | 0.005 |
| 4,4'-Methoxychlor | 72-43-5 | 0.020 |
| Toxaphene | 8001-35-2 | (0.25) |
| PCB-1242 | 53469-21-9 | (0.10) |
| PCB-1248 | 12672-29-6 | (0.10) |
| PCB-1254 | 11097-69-1 | (0.10) |
| PCB-1260 | 11096-82-5 | (0.10) |

() Values in parentheses are estimates.
Actual values are being determined at this time.

Note: Limits are for reagent water.

TABLE B (Cont.)
CRL
INORGANIC DETECTION LIMITS

| COMPOUND | PROCEDURE | DETECTION LIMITS | RANGE | UNITS |
|------------|------------|---------------------|-----------------|-------|
| Aluminum | ICP | 100 | 80 to 1,000,000 | ug/L |
| Antimony | Furnace | 2 | 2 to 30 | ug/L |
| Arsenic | Furnace | 2 | 2 to 30 | ug/L |
| Barium | ICP | 50 | 6 to 20,000 | ug/L |
| Beryllium | ICP | 5 | 1 to 20,000 | ug/L |
| Boron | ICP | 80 | 80 to 20,000 | ug/L |
| Cadmium | ICP | 10 | 10 to 20,000 | ug/L |
| Cadmium | Furnace | 0.2 | 0.2 to 2 | ug/L |
| calcium | ICP | 1000 | 0.5 to 1,000 | mg/L |
| Chromium | ICP | 10 | 8 to 20,000 | ug/L |
| Cobalt | ICP | 10 | 6 to 20,000 | ug/L |
| Copper | ICP | 10 | 6 to 20,000 | ug/L |
| iron | ICP | 100 | 80 to 1,000,000 | ug/L |
| Lead | Furnace | 2 | 2 to 30 | ug/L |
| Lead | ICP | 70 | 70 to 20,000 | ug/L |
| Lithium | ICP | 10 | 10 to 20,000 | ug/L |
| Magnesium | ICP | 1000 | 0.1 to 200 | mg/L |
| Maganese | ICP | 10 | 5 to 20,000 | ug/L |
| Mercury | Cold vapor | 0.2 | 0.1 to 2 | ug/L |
| Molybdenum | ICP | 15 | 15 to 20,000 | ug/L |
| Nickel | ICP | 20 | 15 to 20,000 | ug/L |
| Potassium | ICP | 2000 | 5 to 1,000 | mg/L |
| Selenium | Furnace | 2 | 2 to 30 | ug/L |
| Silver | ICP | 5 | 6 to 10,000 | ug/L |
| Sodium | ICP | 1000 | 1 to 1,000 | mg/L |
| Strontium | ICP | 10 | 10 to 20,000 | ug/L |
| Sulfide | Titration | 1 | < 1 | mg/L |
| Sulfide | Color | 0.05 | < 1 | mg/L |
| Thallium | Furnace | 2 | 2 to 30 | ug/L |
| Titanium | ICP | 25 | 25 to 20,000 | ug/L |
| Tin | ICP | 40 | 40 to 20,000 | ug/L |
| Vanadium | ICP | 10 | 5 to 20,000 | ug/L |
| Yttrium | ICP | 5 | 5 to 20,000 | ug/L |
| Zinc | ICP | 20 | 40 to 1,000,000 | ug/L |
| Cyanide | AA | 5.0 | 8 to 200 | ug/L |

Note: The above list may or may not contain compounds that are routinely analyzed at CRL for low level detection limits for drinking water.

See inorganic Routine Analytical Services for related CAS #.

ADDENDUM C

SPECIAL ANALYTICAL SERVICES
DETECTION LIMITS

Drinking Water Samples

TABLE C
SPECIAL ANALYTICAL SERVICES DRINKING WATER
VOLATILE QUANTITATION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT IN REAGENT WATER |
|---------------------------|------------|-------------------------------------|
| Benzene | 71-43-2 | 1.5 ug/L |
| Bromodichloromethane | 75-27-4 | 1.5 |
| Bromoform | 75-25-2 | 1.5 |
| Bromomethane | 74-83-9 | 1.5 |
| Carbon tetrachloride | 56-23-5 | 1.5 |
| Chlorobenzene | 108-90-7 | 1.5 |
| Chloroethane | 75-00-3 | 1.5 |
| 2-Chloroethyl vinyl ether | 110-75-8 | 1.5 |
| Chloroform | 67-66-3 | 1.5 |
| Chloromethane | 74-87-3 | 1.5 |
| Dibromochloromethane | 124-48-1 | 1.5 |
| 1,1-Dichloroethane | 75-34-3 | 1.5 |
| 1,2-Dichloroethane | 107-06-2 | 1.5 |
| 1,1-Dichloroethene | 75-35-4 | 1.5 |
| Total-1,2-Dichloroethene | 540-59-0 | 1.5 |
| 1,2-Dichloropropane | 78-87-5 | 1.5 |
| cis-1,3-Dichloropropene | 10061-01-5 | 2 |
| trans-1,3-Dichloropropene | 10061-02-6 | 1 |
| Ethyl benzene | 100-41-4 | 1.5 |
| Methylene chloride * | 75-09-2 | 1 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1.5 |
| Tetrachloroethene | 127-18-4 | 1.5 |
| Toluene * | 108-88-3 | 1.5 |
| 1,1,1-Trichloroethane | 71-55-6 | 1.5 |
| 1,1,2-Trichloroethane | 79-00-5 | 1.5 |
| Trichloroethene | 79-01-6 | 1.5 |
| Vinyl chloride | 75-01-4 | 1.5 |
| Acrolein | 107-02-8 | 25 |
| Acetone * | 67-64-1 | 5 |
| Acrylonitrile | 107-13-1 | 25 |
| Carbon disulfide | 75-15-0 | 3 |
| 2-Butanone | 78-93-3 | 5 |
| Vinyl acetate | 108-05-4 | 5 |
| 4-Methyl-2-pentanone | 108-10-1 | 1.5 |
| 2-Hexanone | 519-78-6 | 5 |
| Styrene | 100-42-5 | 1 |
| Xylene (total) | 1330-02-7 | 1.5 |

* Common laboratory solvents.

Blank limit is 5x method detection limit.

() Values in parentheses are estimates.

actual values are being determined at this time.

TABLE C (cont.)
SAS DRINKING WATER
SEMIVOLATILES QUANTITATION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT |
|-----------------------------|------------|--------------------|
| Aniline | 62-53-3 | 1.5 ug/l |
| Bis(2-chloroethyl)ether | 111-44-4 | 1.5 |
| Phenol | 108-95-2 | 2 |
| 2-Chlorophenol | 95-57-8 | 2 |
| 1,3-Dichlorobenzene | 541-73-1 | 2 |
| 1,4-Dichlorobenzene | 106-46-7 | 2 |
| 1,2-Dichlorobenzene | 95-50-1 | 2.5 |
| Benzyl alcohol | 100-51-6 | 2 |
| Bis(2-chloroisopropyl)ether | 39638-32-9 | 2.5 |
| 2-Methylphenol | 95-48-7 | 1 |
| Hexachloroethane | 67-72-1 | 2 |
| n-Nitrosodipropylamine | 621-64-7 | 1.5 |
| Nitrobenzene | 98-95-3 | 2.5 |
| 4-Methylphenol | 106-44-5 | 1 |
| Isophorone | 78-59-1 | 2.5 |
| 2-Nitrophenol | 88-75-5 | 2 |
| 2,4-Dimethylphenol | 105-67-9 | 2 |
| Bis(2-Chloroethoxy)methane | 111-91-1 | 2.5 |
| 2,4-Dichlorophenol | 120-83-2 | 2 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 2 |
| Naphthalene | 91-20-3 | 2 |
| 4-Chloroaniline | 106-47-8 | 2 |
| Hexachlorobutadiene | 87-68-3 | 2.5 |
| Benzoic Acid | 65-85-0 | 20 |
| 2-Methylnapthalene | 91-57-6 | 2 |
| 4-Chloro-3-methylphenol | 59-50-7 | 1.5 |
| Hexachlorocyclopentadiene | 77-47-4 | 2 |
| 2,4,6-Trichlorophenol | 88-06-2 | 1.5 |
| 2,4,5-Trichlorophenol | 95-95-4 | 1.5 |
| 2-Chloronapthalene | 91-58-7 | 1.5 |
| Acenaphthylene | 208-96-8 | 1.5 |
| Dimethyl phthalate | 131-11-3 | 1.5 |
| 2,6-Dinitrotoluene | 606-20-2 | 1 |
| Acenaphthene | 83-32-9 | 1.5 |
| 3-Nitroaniline | 99-09-2 | 2.5 |
| Dibenzofuran | 132-64-9 | 1 |
| 2,4-Dinitrophenol | 51-28-5 | (15) |
| 2,4-Dinitrotoluene | 121-14-2 | 1 |

TABLE C (Cont.)
SAS DRINKING WATER
SEMIVOLATILE QUANTITATION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT |
|-----------------------------|-----------|--------------------|
| Fluorene | 86-73-7 | 1 ug/L |
| 4-Nitrophenol | 100-02-7 | 1.5 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | 1 |
| Diethyl phthalate | 84-66-2 | 1 |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | (15) |
| 1,2-Diphenylhydrazine | 122-66-7 | 1 |
| n-Nitrosodiphenylamine * | 86-30-6 | |
| Diphenylamine * | 122-39-4 | 1.5 |
| 4-Nitroaniline | 100-01-6 | 3 |
| 4-Bromophenyl-phenylether | 101-55-3 | 1.5 |
| Hexachlorobenzene | 118-74-1 | 1.5 |
| Pentachlorophenol | 87-86-5 | 2 |
| Phenanthrene | 85-01-8 | 1 |
| Anthracene | 120-12-7 | 2.5 |
| di-n-Butyl phthalate | 84-74-2 | 2 |
| Fluoranthene | 206-44-0 | 1.5 |
| Pyrene | 129-00-0 | 1.5 |
| Butyl benzyl phthalate | 85-68-7 | 3.5 |
| Chrysene ** | 218-01-9 | |
| Benzo(A)Anthracene ** | 56-55-3 | 1.5 |
| bis(2-ethylhexyl)phthalate | 117-81-7 | 1 |
| di-n-Octyl phthalate | 117-84-0 | 1.5 |
| Benzo(b)fluoranthene *** | 205-99-2 | |
| Benzo(k)fluoranthene *** | 207-08-9 | 1.5 |
| Benzo(a)pyrene | 50-32-8 | 2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 3.5 |
| Dibenzo(a,h)anthracene | 53-70-3 | 2.5 |
| Benzo(g,h,i)perylene | 191-24-2 | 4 |
| 2-Nitroaniline | 88-74-4 | 1 |

* These two parameters are reported as a total.

** These two parameters are reported as a total.

*** These two parameters are reported as a total.

() Values in parentheses are estimates.

The actual values are being determined at this time.

Note: Limits are for reagent water.

TABLE C (Cont.)
SAS DRINKING WATER
PESTICIDE AND PCB QUANTITATION LIMITS

| PARAMETER | CAS # | DETECTION LIMIT |
|---------------------|------------|--------------------|
| Aldrin | 309-00-2 | 0.005 ug/L |
| alpha BHC | 319-84-6 | 0.010 |
| beta BHC | 319-85-7 | 0.005 |
| delta BHC | 319-86-8 | 0.005 |
| gamma BHC (Lindane) | 58-89-9 | 0.005 |
| alpha-Chlordane | 5103-71-9 | 0.020 |
| gamma-Chlordane | 5103-74-2 | 0.020 |
| 4,4'-DDD | 72-54-8 | 0.020 |
| 4,4'-DDE | 72-55-9 | 0.005 |
| 4,4'-DDT | 50-29-3 | 0.020 |
| Dieldrin | 60-57-1 | 0.010 |
| Endosulfan I | 959-98-8 | 0.010 |
| Endosulfan II | 33213-65-9 | 0.010 |
| Endosulfan sulfate | 1031-07-8 | 0.10 |
| Endrin | 72-20-8 | 0.010 |
| Endrin Aldehyde | 7421-93-4 | (0.030) |
| Endrin Ketone | 53494-70-5 | 0.030 |
| Heptachlor | 76-44-8 | 0.030 |
| Heptachlor Epoxide | 1024-57-3 | 0.005 |
| 4,4'-Methoxychlor | 72-43-5 | 0.020 |
| Toxaphene | 8001-35-2 | 0.25 |
| Aroclor-1016 | 12674-11-2 | 0.10 |
| Aroclor-1221 | 11104-28-2 | 0.10 |
| Aroclor-1232 | 11141-16-5 | 0.10 |
| Aroclor-1242 | 53469-21-9 | 0.10 |
| Aroclor-1248 | 12672-29-6 | 0.10 |
| Aroclor-1254 | 11097-69-1 | 0.10 |
| Aroclor-1260 | 11096-82-5 | 0.10 |

() Values in parentheses are estimates.
Actual values are being determined at this time.

Note: Limits are for reagent water.

TABLE C (Cont.)
SAS DRINKING WATER
INORGANIC DETECTION LIMITS

| PARAMETER | PROCEDURE | DETECTION LIMIT |
|-----------|--------------|--------------------|
| Aluminum | ICP | 100 |
| Antimony | GFAA | 5 |
| Arsenic | GFAA | 5 |
| Barium | ICP | 50 |
| Beryllium | ICP | 5 |
| Cadmium | GFAA | 0.5 |
| Calcium | ICP | 1000 |
| Chromium | ICP | 10 |
| Cobalt | ICP | 10 |
| Copper | ICP | 10 |
| Iron | ICP | 100 |
| Lead | GFAA | 2 |
| Magnesium | ICP | 1000 |
| Manganese | ICP | 10 |
| Mercury | Cold Vapor | 0.2 |
| Nickel | ICP | 20 |
| Potassium | ICP | 2000 |
| Selenium | GFAA | 2 |
| Silver | ICP | 5 |
| Sodium | ICP | 1000 |
| Thallium | GFAA | 2 |
| Tin | ICP | 40 |
| Vanadium | ICP | 10 |
| Zinc | ICP | 20 |
| Cyanide | Colorimetric | 10 |

Note: The above list may or may not contain compounds that are routinely analyzed at CRL for low level detection limits for drinking water.

See inorganic Routine Analytical Services (RAS) for related CAS #.

APPENDIX E

WELL LOGS OF THE AREA OF THE SITE

REQUESTED AND MAIL ORIGINAL TO STATE
UMER HEALTH PROTECTION, 535 WEST
I. DO NOT 'TACH GEO' 'ICAL/WATER
PROPER W. L. LOCATIO.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

NON-RESPONSIVE

616, STATE OFFICE BUILDING, SPRINGFIELD,
ICAL / WATER SURVEYS SECTION. BE SURE TO

NON-RESPONSIVE

17. Static level 60 ft. below casing top which is 1 ft.
above ground level. Pumping level 80 ft. when pumping at 20
gpm for 2 hours.

| 18. FORMATIONS PASSED THROUGH | THICKNESS | DEPTH OF BOTTOM |
|-------------------------------|-----------|-----------------|
| yellow clay | 37 | 37 |
| gray clay | 29 | 66 |
| sandy gray clay | 55 | 121 |
| rock | 19 | 140 |
| | | |
| | | |
| | | |
| | | |
| | | |

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED James Fisher DATE May 18, 1973

WHITESIDE

COUNTY No. 473

8-21N-5E

WELL LOG #1

| | | | | |
|----|-------------------|---|-----|--|
| 6" | Steel T & C 19.45 | 0 | 144 | SECTION PLAT 100'N 150'E SW/4 NE NW NW |
| | | | | |
| | | | | |

16. Size Hole below casing: 6 in.
17. Static level 60 ft. below casing top which is 2 ft.
above ground level. Pumping level 100 ft. when pumping at 15
gpm for 2 hours.

| 18. FORMATIONS PASSED THROUGH | THICKNESS | DEPTH OF BOTTOM |
|-------------------------------|-----------|-----------------|
| Top Soil | 1 | 1 |
| Yellow Clay | 17 | 18 |
| Blue Clay | 39 | 57 |
| Sandy blue Clay | 42 | 99 |
| Blue Clay and shale | 25 | 124 |
| Niagara | 38 | 162 |
| | | |
| | | |
| | | |

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Thom Jones DATE 12-27-82

WELL LOG #2

8-21N-5E

STATE OFFICE BUILDING, SPRINGFIELD,
CAL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 11-26-71

NON-RESPONSIVE

| Dim. (in.) | Kind and Weight | From (FL) | To (FL) | LOCATION IN SECTION PLAT |
|------------|-----------------|-----------|---------|--------------------------|
| 6 | Steel 19.45 | 0 | 115 | NE NE SW (Permit) |
| | | | | |
| | | | | |

16. Size Hole below casing: 6 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 20 gpm for 2 hours.

| 18. FORMATIONS PASSED THROUGH | THICKNESS | DEPTH OF BOTTOM |
|-------------------------------|-----------|-----------------|
| yellow clay | 46 | 46 |
| greenish clay | 34 | 80 |
| soft rock | 30 | 110 |
| hard | 10 | 120 |
| | | |
| | | |
| | | |
| | | |

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED James Ford DATE Nov 26, 1971
COUNTY No. 364

WHITESIDE

7-21N-5E

WELL LOG #3

STATE OFFICE BUILDING, SPRINGFIELD,
CAL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 2-4-74

NON-RESPONSIVE

| Dim. (in.) | Kind and Weight | From (FL) | To (FL) | LOCATION IN SECTION PLAT |
|------------|-----------------|-----------|---------|--------------------------|
| 6 | Steel 19.45 | 0 | 110 | NE NE SW (Permit) |
| | | | | |
| | | | | |

16. Size Hole below casing: 6 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 20 gpm for 2 hours.

| 18. FORMATIONS PASSED THROUGH | THICKNESS | DEPTH OF BOTTOM |
|-------------------------------|-----------|-----------------|
| Yellow clay | 29 | 29 |
| Gray clay | 17 | 46 |
| Blue clay | 19 | 65 |
| rock | 7.5 | 140 |
| | | |
| | | |
| | | |
| | | |

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED James Ford DATE Feb 4, 1974
COUNTY No. 20525

WHITESIDE

7-21N-5E

WELL LOG #4

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DIVISION OF PUBLIC WATER SUPPLIES

Inventory Sheet

Date inventoried 11/6/73

Supply: MORRISON

Sheet 15 of 23

Item: WELL #4

SUPPLY: MORRISON

WELL NO: 4 High St

NON-RESPONSIVE

CHRONOLOGY:

1968 - Drilled 1769 feet deep
by Wabbling Well Works, Inc.

PUMP: Peerless, FMC.

S/N: 217258.

Capacity: 1075

Installed by: Willet Hoffmann.

MOTOR: G. E. Model: 5KG286 XH 37A.

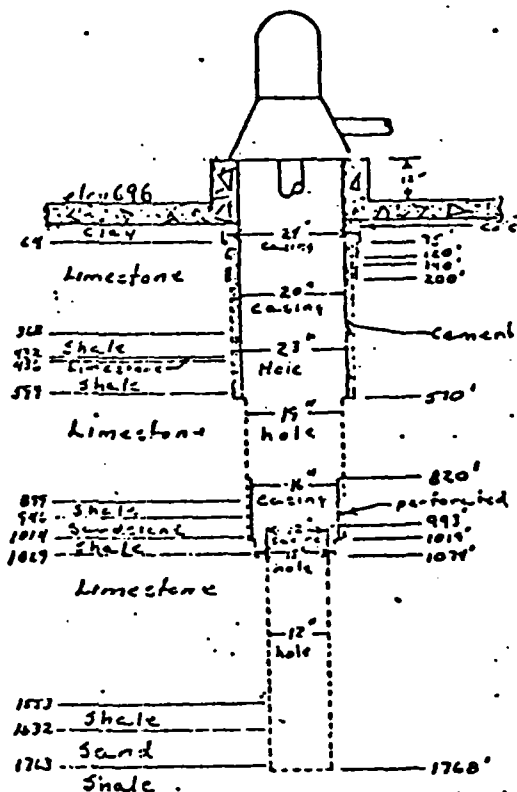
S/N: G.DJ 703146,

HP: 200, Phase: 3 Cycle: 60.

Volt: 460, Amps: 231, RPM: 1765.

Rating: 60°C, SF: 1.15

ACCESSORIES: Sample tap, Casing
Vent, pump block, air relief,
air gage, by pass discharge,



WELL LOG #5

PRODUCTION DATA:

| | | | | | | | |
|------------------|--------|--|--|--|--|--|--|
| DATE | 2/2/68 | | | | | | |
| STATIC LEVEL-FT | 185 | | | | | | |
| PUMPING LEVEL-FT | 1769 | | | | | | |
| DATE | 10/85 | | | | | | |